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33.00 per annum, in advance. See 50 if not paid it advance. Postage free. Single copies 5 cents. All persons sending contributions to The PLOUGHMAP for use in its columns must sign their name, not not sees a life for publication, but as a guarantee of good faith, otherwise they will be consigned to the uset-basket. All matter intended for publication should be written on note size paper, with ink, a.2 pondence from practical farmers, giving the is of their experience, is solicited. Letters do be signed with the writer's realname, in full, h will be printed or not, as the writer may

Entered as second-class mail matter.

## Making the Most of Manure.

One hundred head of average cattle properly cared for during a five-months winter will produce from five hundred to one thousand tons of farmyard manure worth on the at the expiration of a lease. average \$1.50 per ton for the fertilization of succeeding crops, states T. Lawson, in the yield and quality of the crop, and no soil so poor that a liberal application of this fer-tilizer will not be followed by satsifactory results. Fifteen to twenty tons to the acre of properly prepared farmyard manure as a topdressing to a worn-out hay meadow will double or treble its previous product, and the increase be apparent for years. Its value for fertilizing purposes largely depends on its constituents, its methods of preparation, and the condition in which it

is applied. The solid portion of excreta of cattle has comparatively little value as a fertilizer unless these are being fattened on a liberal nitrogenous ration, such as cottonseed meal, nator of any farm. It supplies the nitrowhen a liberal percentage is liable to be unassimilated and pass through giving it in addition a large quantity of decaying a value as a fertilzer, but in young cattle organic matter, which forms the necessary and milk stock the assimilation is usually humus to a worn-out soil, which a chemical such as to leave the solid excreta only inert organic matter. The liquid portion, or urine, contains the waste of the tissues in the form of urates, and salts, which stored in a suitable vehicle and allowed to ferment and undergo a chemical omposition makes a very rich and effect-

The art of successfully making a rich fertilizer of this animal excreta is to furnish the necessary vehicle for its absorplaborer who is in need of a solid meal, it tion, to keep it under cover—that is, do not allow the rain to wash the liquid out. Keep it firmly tramped down so that the condition will be worse than the firmly tramped down so that the condition will be worse than the firmly tramped down so that the condition will be worse than the firmly tramped down so that the condition will be worse than the firmly tramped down so that the condition will be worse than the firmly tramped down so that the condition will be worse than the firmly tramped down so that the condition will be worse than the condition will be worse than the firmly tramped down so that the condition will be worse than the condition will be worse the condition will be worse than the condition will be worse the condition will be worse than the condition will be worse that the condition will be worse than the condition will be worse t sufficient heat to evaporate the nitrogen in form of ammonia. A brief description of farm buildings common in the sufficient heat to evaporate the nitrogen in form of ammonia. A brief description of farm buildings common in the sufficient heat to evaporate the nitrogen their farmyard manure, but they could afford some sort of make that not all could afford the sufficient heat to evaporate the nitrogen in form of the sufficient heat to evaporate the nitrogen in form of ammonia. farm buildings common in the writer's native district thirty years ago, in which preparation of farmyard manure as a staple fertilizer was brought nearer to a state of practical perfection than ever he has seen elsewhere, will best illustrate the subject matter of this article.

Farm buildings for a farm in ordinary course of cropping containing approxi-mately three hundred acres, worth an annual rent of say \$10 to \$15 an acre, would consist of a square of buildings about three hundred feet to the side. Three sides of this square were enclosed with solid buildings (about thirty feet wide; the entire centre of this square was roofed in, carried on pillars. The outer buildings on the three sides were used for stabling horses, cows and steers for fattening; they also contained implement and machinery storage, fertilizer house, fixed power threshing, grinding, chaffing, root pulping and cake crushing machinery, feed storage, straw, grain, etc. The centre of the square was divided into loose yards for stock, equipped with feeding troughs, hay racks and all the conveniences for feeding the cattle with as little labor and disturbance to the stock as possible. The floors of the yards or covered courts as they were called locally, were excavated five or six feet below the level of the outer buildings and also below the general level of the surface on the open side of the square. The floor and sides were securely grouted to keep out bottom water or seepage, the roofs were carefully spouted, so that not a drop of rain water ot inside. There was a plentiful supply of roof lights and also roof ventilation, which furnished pure air and plenty of daylight. The urine from the horse, cow and eeders' stables was drained into these covered yards, in each of which were kept rom fifteen to twenty head of cattleusually young stockers. All of the solid xcreta was also emptied into and scattered ver them. These yards were littered every vening with straw to make dry beds for

The constant tramping of the cattle over this mass pressed it into a solid which was all the time soaked full of decomposed urine. This was allowed to accumulate until it rose to the level of the drainage from the tables, five or six feet deep. Then the armyard manure was carted out to the ields where it was to be applied and imped in big mounds of two to three nundred tons each, being carted over by the teams to tramp it down solid to pre-vent fermentation. There had previously

as possible and the foundation compost reached the stage where farming is honestly thrown up and spread on top of it to retain the gases. The fermentation then became Even here facilities are not well adapted to.

Even here facilities are not well adapted to.

Even here facilities are not well adapted to. thrown up and spread on top of it to retain the gases. The fermentation then became very rapid and decomposition equally so. Usually in ten days or two weeks it was ready to apply. The heat and fermentation had made it in a nice condition for distribution. The yards were usually allowed to fill up to the top at the end of the season, as farmyard manure fresh from the yard was preferred for application to root crops, and it saved the labor of handling twice. With the exception of a few inches on top this manure was perfectly rotted, and not a drop of the exercta, either liquid or solid of these cattle and horses was wasted, and all the rubbish, spoiled straw, hay and all waste was taken into the yards to help ab-sorb it. Where cattle were soil fed in summer they were kept in these covered yards and littered with straw, making much valuable manure which was usually applied to the autumn wheat crop in the

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Such a farm as I describe would usually keep not less than one hundred head mixed cattle stock, and would produce from 1200 to 1800 tons of farmyard manure. Such ma nure as I describe was worth then and there \$1.75 to \$2 per ton on the farm; that was a usual price paid for it on valuation

These farmers who had to pay \$10 to \$15 per acre rent could not afford to waste their Rural World. There is no soil so rich that farmyard manure will not increase the manure their crops would not have paid manure their crops would not have paid them the expense of cultivation; in addition to this they had to liberally use chemical fertilizers, and were regular buyers of cotton and linseed cakes, bran, etc.

Chemical fertilizers are all right in their own place, which is to stimulate or furnish a necessary plant food constituent to form a more perfect plant food ration for some particular crop, but they will never enrich a farm in that way, unless it be to grow more food for stock to furnish more roughness for the manufacture of farmyard manure, which is, without the slightest doubt, the most certain, most easily pro cured, as well as the most effective rejuvestimulant can never do. True, you can get this by plowing down clover, or other legumes, that is, to a limited extent, but if you would look after your farmyard manure, this method of furnishing humus at the expense of the soil would not be neces-Chemical fertilizers applied to a sary. soil, which is run down, worn out and de-void of humus, has about the same effect on

I am aware that not all could afford the better than having a corner feed lot of several acres in the open, which the excreta overfertilizes and renders useless where the rain washes the liquid to the nearest creak where it is lost. They could put up some kind of a shelter for their cattle, set their feed troughs under it, and litter it daily with the straw that is lying rotting in the corner of some outlying field, give their stock a chance to rest comfortably and dry in cold nights and at the same time accumulate a rich farmyard manure while they were getting rest and shelter. It only takes a little labor.

It takes just as much labor to cultivate half a crop as to cultivate a full crop. There are numbers of farms with stock barns, but these are rarely used or even adapted to saving and caring for the tarmyard manure. I know some of your readers will say that cattle are roving over our corn fields and pastures and nothing is lost. For their information I will say that very little is gained; the chemical constituents of fresh urine are so acrid that they destroy rather than assist vegetation. It has to un-dergo the process of decomposition and chemical change before it has any fertilizing value. Nothing is got without labor, care and intelligence. Continual taking from and adding up nothing to will wear

out the richest soils in time. This subject of farmyard manure is essentially an important question to every farmer who is worthy of the name—plowing, planting and harvesting is not farming, it is only robbing the soil. Farming is where a man gets maximum results for his labor and money expended and keeps his farm in condition to get these right along. The common practice in the West is to get everything possible out of the soil for the least possible amount of exertion. Even had the average farmer farmyard manure ready made, he is too lazy to haul it out and apply it.

Don't get away with the idea that your land is too rich and does not need it. There is not an acre of the American bottom land that farmyard manure would not improve the quantity and quality of the crop. Twenty tons to the acre, of well-made farmyard manure, would increase the potato crop on its best soils two or three tons per acre and increase the yield of cabbages thirty to forty per cent. The same amount of it would increase the corn crop on good land from forty to sixty or seventy bushels per acre. There is more stable manure or of red dumped into the Mississippi river every "If the

## Fighting the Scale Pest.

TIME TO GET READY.

Tree owners in sections of many of the Eastern States have a hard campaign before them in saving their property from the San Jose scale insect. There appears to be considerable interest in the subject, and many are looking for the best outfit and methods.

The following method of preparing a mixt ure is the most convenient of any yet found, but is too expensive for extensive spraying work. Take fresh lime one pound, sul-phide of sulphur (liver of sulphur) one pound, water, two gallons. Dissolve the sulphide in water in a pail, slake the lime in another pail, and when ,all is in liquid form, add one to the other and dilute with water. No boiling is required, as the sulphide of potassium is readily soluble in

EXPERIENCE IN CONNECTICUT.

The Connecticut Experiment Station has issued a bulletin giving the result of the work of Prof. W. E. Britton, entomologist, and his assistant, Prof. B. H. Walden, in It is none too soon to be getting ready, as the scale campaign begins very early.

To kill the scale insect the mixture is best applied before the buds start in the spring.

The biting mixtures used would injure the foliage, but do not harm the bark during at Yalesville. Other orchards at Southing-

## Rights of Farm Owners.

In your issue of Dec. 19, you speak of sensible resolutions by Massachusetts State Grange toward giving the farmer some con-trol of fish and game upon his own lands. I would ask if the laws passed by any legislature are constitutional in the supreme courts permitting a league to turn animals or people out upon our farms and destroy our crops by cutting and trampling them down without our being able to stop them or obtain damages. It resolves itself into this problem: who owns the land, the man holding the deed or the game league of the State? There will be a strong movement in the next session of the Legislature to deter-

mine these points. Is there any justice when the farmer has raised a crop, even the feed in his past-ures, and fattened hens by the dozens, and then outside parties being allowed to come in and fire bullets that are good to kill within a mile, without regard to the safety of people, cattle or sheep? In many cases it's the "fool and the gun, bound to shoot something and don't care what." Give the farmer the right to kill what he chooses on his own land, also the right to keep all others off his premises should he ch The farmer has no right to turn tame stock upon the gardens and lawns of a village, and why should people be permitted to trespass upon the farm lands?

Ludlow, Vt. S. S MAYO.

## Raise More Hogs.

Nearly all writers on swine feeding in the Eastern States give much prominence trees when grown for ornament will to skimmilk, and for the first few weeks of the pig's life nothing is better, but unfortunately as soon as you begin to keep swine as a business, and not merely to eat up something of no other value, the skimmilk on nearly if not quite all farms is insufficient to go around, and so something else must be provided, and for the first few weeks ground peas and oats with twenty per cent. of linseed meal cooked or well scalded, with what milk you have, makes a fair substitute. Give no more than is eaten at once, and feed as often as you can (though we do not often feed more than three times), till three months old, after that twice daily till finished. I am not much of a believer in a fattening period of the pig's life. Give them all they will eat clean from start to finish. Keep on the sow until six or eight weeks old. If you raise the pigs yourself, as you should, sell them as soon as big enough to bring full market price and begin again with small ones. Keep the breed you like best. We prefer the thoroughbred Berkshire or their market price and begin again with small ones. Keep the breed you like best. We prefer the thoroughbred Berkshire or their grades, but don't seek to force our preference on any one else. They are hardy, docile, good and regular breeders, good foragers and feeders, with great hams and a feeders, with great hams and a feeders. agers and feeders, with great hams and a large quantity of lean meat, and are eagerly sought after by butchers and packers.

Far too little care is exercised regarding forest fires, and something more effective should be put in force.

Steuben County, N. Y. Add to this that they are as like as two peas in a pod and you have the ideal hog for large ranches. New England doesn't need to send to Chicago for pork ribs that she can just as well raise at home, and here is hoping she won't always have to. E. S. DIXON.

Androscoggin County, Me.

## The Farm Woodlot.

No farm is complete without its woodlot. and the farmer who possesses one should exercise the greatest care in its preservation; and if he has no woodland, but owns some rough land, it will be an excellent plan to set apart a certain portion and plant

To start a young woodlot need not be the

difficult work that at first thought might be supposed; as any rough land may in a few years time, if properly managed, be covered by a young and thrifty growth of wood and timber; but of course if the land is of a more mellow nature, the labor would be in an inexpensive way and possibly "on could be taken at a time, and planted with young trees; another plan night be adopted by planting nuts and seeds where the trees are to grow. If the ground selected for this purpose be too rocky and broken to be

it to trees.

and if it is impracticable to even do this, holes can be dug here and there with pick and shovel or grub hoe for the purpose. Of course, in starting a young tree or timber plantation, as here suggested, stock of all kinds must be kept from grazing there, or the young growth will be destroyed. There may be better methods for accomplishing this purpose, but I have tried to show that a growth of timber can be started by anybody who wishes to do so; and that various methods may be adopted, as well as locations, for the accomplishment of the same object, the main point being to study the conditions over carefully, and act in some way towards providing for the future supply of wood and timber.

Chestnut is a very valuable timber, and wherever it will thrive it should be planted quite plentifully. It grows with such rapidity that only a few years are required to grow into fence posts, and the demand for been a foundation of about six inches of lime reduced a safe and effective formlime and soil compost placed on the foundation of the mound and a covering of a
few inches of it to prevent the escape of free ammonia.

Ten days before the manure was to be
used it was turned over by hand labor with
a manure fork and thrown up as loosely

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The worn-out soils of the East have been so long accusations were are the fence on the two manure forty gallons.

The worn-out soils of the East have before the leaves appeared, being counts a railroad ties is so great that the growing of

is continually in need of a stick of timber for building material, repairs of something or other.

WHOLE NO. 3233

It is now time for the farmer to be in the forest looking after his year's supply of fuel, and he should cut in a painstaking manner, being careful to save all the young, thrifty trees that it is possible to spare. To be able to secure the year's supply of fuel from one's own woodlot is something very gratifying, and causes a farmer to feel inde-pendent of the coal companies. When traveling in New England it is very pleasing to note how careful the thrifty farmer is to have a nice lot of seasoned wood neatly piled in the wood house. The custom is very much more prevalent there than in this section of country, and it is a custom to be

burns wood. I was very strongly impressed at the rapidity with which wood grows, on a visit to the town of Wilmot, N. H., two years ago. While walking over an old farm with a cousin, he called my attention to a side hill, which twenty-five years ago was an open pasture, and where we, as boys, used to have many a slide down the hill on our sleds. I was really astonished to see it completely covered with a growth of quite large trees; in fact, it had the appearance of a dense wood at the time of my visit.

To have a windbreak of forest trees about

commended to the farmer wherever he

the house is often a very desirable and valuable feature. For this purpose ever-greens, like the white pine, hemlock and spruce, cannot be excelled. The common hemlock is a beautiful tree to set near the buildings for ornament. In the winter season, particularly, it adds greatly to the at tractiveness of the home. A word right here in regard to the pruning of evergreen not be out of place. The pyramidal form should always be maintained. The top and branches should be annually clipped back, and the lower branches should never be cut off, for when this is done the beauty is

With the mountains and valleys of New England growing a patch of forest here and there, it presents a very beautiful landscape to the tourist, particularly in autumn, when the gorgeous colors make the mountains shine forth in a splendor that must be seen to be appreciated. Many tourists fail to see New Hampshire at its most beautiful season, because they leave too early. It is no doubt a fact that the people who have always lived amidst the grand beauties of New Hampshire do not appreciate them half enough

The laws in regard to starting forest fires are not nearly so strong as they should be. They should be made very much more effect-Steuben County, N. Y.

## For Hillside Orchards

At one of the winter's lectures on orcharding, the importance of cover crops was illustrated with lantern slides. One of the views showed the effect of fall rains on orchards that had been kept in cultivation all season and lett bare in the fall. The land in this case, having considerable fall to it, was seamed in every direction, and the best of the surface soil washed out. Other views showed in contrast the surface of the orchard well protected with cover crops of clover, buckwheat, vetch or rape, sown in the middle of July.

Not only was the soil prevented from washing by this means, but the roots of the trees were protected against winter frosts by the subsequent rotting of the growth; a large addition was made to the humus of the soil. Other illustrations showed how the roots of clover penetrated deep into the soil, and the effect this penetration must have in bringing up nutriment from below and in breaking up the subsoil.

## Grange Topics for 1904.

First quarter: General topic, "Good Roads." Is national aid to road building advisable and what can the Grange do to secureit? To what extent is State aid to road building justifiable? What can be done by local action to secure better roads?

Second quarter: General topic, "Good Crops." How important is the adaptability of the crop to soil and demands of the local market? What are the relative merits from cultivation and fertilization derived by growing crops? Can improvement be made in the present method of marketing crops?

Third quarter: General topic, "Good Citizens." What is the duty of the farmer in the management of the affairs of his political party? What is the duty of the farmer in the management of the affairs of State or nation? What is the duty of the farmer in the management of local affairs,

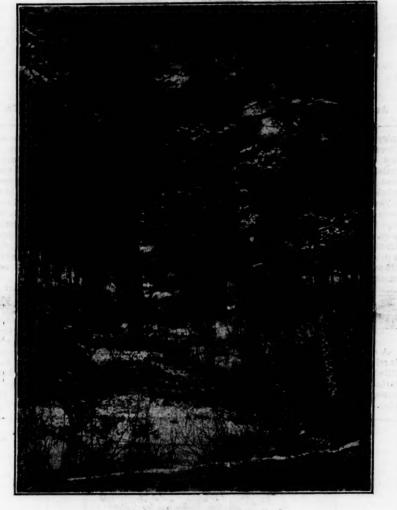
including churches, schools and roads?
Fourth quarter: General topic, "Good Homes." What constitutes the essential features inside the ideal home? What are required as the outside attractions of the ideal home? What should the different members of the family contribute to an ideal home?

N. J. BACHELDER, ideal home? N. J. BACHELLA.

Lecturer National Grange.

Concord, N. H.

That is a pleasant tale of the two



THE WOODS IN WINTER. Photo by C. A. Reed, Worcester, Mass.

the dormant season. It is best to have an outfit which can be used for other kinds of included in the experiments. The operaspraying. The Connecticut station, which tions are described at length in Bulletin has had wide experience in this line, recom mends in response to an inquiry an apparatus like the one shown in the illustration. It is a barrel pump in a farm wagon, and brief summary of the work: worked by one man to drive the horses and handle the pump and two are to manage the hose. The method of cooking the spray mixture is also illustrated. It is heated in barrels with the aid of steam from a portable engine. This cooking process is the most unpleasant part of the operation, ordinarily, and for that reason it is to be hoped that a mixture will soon be perfected that can be used without cooking. There are hopes of a kerosene or petroleum mixture that will answer.

THE REGULAR COMMERCIAL MIXTURE uses ordinary powdered sulphur. According to Prof. W. E. Britton: "Tests in at least three different States show that good results may be obtained by boiling the mixture for forty or even thirty minutes instead of the longer periods (from one to three hours) that have been recommended in the past. The sulphur, however, should be made into a paste and added to the lime before the latter has been slaked. The heat

from the slaking lime, to some extent, takes the place of the boiling and probably dissolves a small portion of the sulphur, though this heat alone is not sufficient to dissolve very much sulphur under ordinary conditions. The quantity of lime used has also been excessive. Formerly it was thought that a liberal use of lime would enable the mixture to form a heavier coating upon the trees and would make the mixture stick better; but in our experiments a heavy whitewash (one pound of lime to two gallons of water) washed off readily and a large proportion of the in-sects were not killed. Other experimenters have been successful in killing the scale where the mixture used contained equal

quantities of lime and sulphur. "Our own experience agrees with that of others that the salt is unnecessary either for the purpose of dissolving the sulphur r of rendering the mixture more adhesive.
"If the salt is omitted and the quantity of lime reduced a safe and effective form-

No. 10, entomological series, and it may be obtained by application to the experiment station at New Haven, Ct. Following is a The trees were chiefly peach, pear and

apple. The chief mixtures used were: Lime, sulphur and salt; lime and sulphur; lime, sulphur and copper sulphate; lime and potassium sulphide; whitewash; strong bordeaux mixture; twenty-five per cent. orude oil in water upon dormant trees and kerosene soap emulsion upon trees in foli-Most of the trees were sprayed with the

lime, sulphur and salt mixture (California even lighter. If one wishes to go about the wash); this and the lime and sulphur mixt- work of reafforesting a portion of his farm ure and the lime and potassium sulphide proved about equally effective in destroying the instalment plan," I can see no reason the scales and in sticking to the trees. why this cannot be done. A small piece Whitewash and strong bordeaux mixture as used in these experiments were unsatisfactory scale destroyers. The former soon disappeared from the trees, while the latter remained about as long as the lime and sul-

phur mixtures. The Oregon wash (lime, sulphur and copper sulphate) soon disappeared from the trees, though in one case it was quite case might be, could be planted therein; destructive to the scale insects. Twentyfive per cent. crude oil in water must be regarded as an excellent scale destroyer. Though no injury resulted to the trees in these experiments, many trees have been damaged here and in other States, and it is hardly a sate treatment for the average orchardist to use, but the oil mixtures have greater penetrating power than any of the lime and sulphur mixtures, and therefore may be expected to destroy a larger propor-tion of scale insects on badly infested trees.

Several Connecticut orchardists have sprayed their orchards (containing nearly forty thousand trees) with the lime and sulphur mixtures with generally satisfac-tory results. Several thousand trees have also been sprayed with oil with good re-suits, though trees were injured in some

The lime and sulphur mixtures remained upon the trees longest when applied just before the leaves appeared, being protected by them. In some cases it washed off and

## Dairy.

Butter Somewhat Higher.

Prices show a fractional gain for the better grades of creamery, dairy and box goods. Much of the fresh stock shows the effect of cold weather in a bitter or inferior flavor, and strictly extra lots are rather scarce. Receipts from the West are light. Storage extras are selling well at quotations, but low grades show no improvement in

Chapin & Adams: The butter market shows an advance of about one-half a cent, owing to lighter receipts. The only spe-cial feature is the abundance of cold-stor-age stock which tends to hold the market down. On that account any marked advance in the general market hardly seems probable, and prices may go down unless the storage people are able to unload their stocks at present quotations. Eggs are higher for storage stock. Fresh eggs are about as high as they can get because people go without them when figures are extreme. The cheese market shows no

There is very little doing in the cheese market and prices hold nominally unchanged. Fancy September made are held with a fair degree of confidence, both small and large sizes, on the basis of 12 cents for finest grades, but that figure is the extreme, and some very nice lots of small sizes obtainable a shade cheaper. Current receipts of late-made cheese have been moderate, but there is considerable accumulation of previous receipts, the bulk of which are of undesirable quality, and prices continue weak and drive the control of sisted mostly of through cheese, but include a few local lots of skims. Demand for the latter has been moderate during the week, but some lots going out from previous purchases. Home trade demand for skims dull and general feeling weak and irregular. Exports to Europe foot up 3366 boxes, including 2966 boxes to Liverpool and four hundred boxes to London.

The amount of storage butter in Boston and New York is very much in excess of the amount on hand January last year. It is a question whether this large stock can be disposed of without further pressing the market.

## A Portable Milking Machine.

It is primarily intended for small herds, and there are no stationary fixtures about it. It was originally made in two forms, for hand power, recommended to farmers who depend on their children to do most of the milking, and for foot power, "adapted where grown people do the milking." Of late the latter kind only has been manufactured, however, as it seemed to meet with more favor. The price of this machine is \$75. It consists of an air pump, worked by foot power, two pieces of rubber hose and eight suction cups that are attached to the teats of two cows; these are thus milked at the same time, the operator, who sits between the two cows, working the pump with his feet, and placing the teat cups against the teats. On opening the spigots the suction rapidly draws the cups over the teats, and the milk begins to flow into the milk pail, which is hung on the spout of the pump.

The teat cup is made of three pieces, and is of hard rubber; to the small end of the



A PORTABLE MILKING MACHINE.

cup a piece of glass tubing is attached through which the milk may be seen, and this again is connected with a small rubber tube. By means of a spigot in the tube suction may be shut off when the teat is empty. The milk is conveyed from the spigot to the head, where the milk from all four tests unites and passes into the large hose to the pail.

This milking machine has been in operation at a number of farms in the vicinity of Madison, Wis., for a year or more, and also in a few localities in the East. So far as I have been able to learn, it has given good satisfaction. Its simplicity of construction, as well as ease and rapidity of operation are strong points in its favor. One man working all alone will milk eight cows in fifteen minutes with the machine The manufacturer writes that he expects to make some improvements in the machine during the present year (1904), and that he will then begin to push its sale in the dairy F. W. E. sections of our country. Harrisburg, Pa.

## Tests of Jersey Cows.

Signora Bruce 154547: Sire, Harry B. Gordon 47246; dam, Janet Bruce 100862. Fat, 12.288 pounds; milk, 250 pounds. Test made from Oct. 7 to 13, 1903; age, 3 years 10 months; estimated weight, —; fed 5 quarts ground barley twice daily, alfalfa hay twice daily. Property of Guy H. Miller, Riverside, Cal.

Dansker's Griselda 157858: Sire, Dans ker 49535; dam, Earl's Gazette 146213. Butter, 15 pounds 6 ounces; milk, 211 pounds 14 ounces. Test made from Nov. 24 to 30, 1903; age, 3 years; jestimated weight, 700 pounds; fed 4 quarts gluten feed and 4 quarts brewers' grains daily. Property of John G. Tallant, Pembroke, N. H.

Pansy Darling of Lawn 2d 147916: Sire, Applause 34234; dam, Pansy Darling of Lawn 76637. Butter, 15 pounds 2 ounces milk, 204 pounds 13 ounces. Test made from Dec. 7 to 13, 1903; age, 4 years 5 onths; estimated weight, 800 pounds; fed 7½ pounds wheat bran, 7½ pounds corn and oats chop and 2 pounds cottonseed meal daily; prairie and sorghum hay. Property of A. F. Piatter, Denison, Tex.

Nancy O'Neil 147723—Twenty-eight days: Sire, Carlyle Boy 36257; dam, Lizzie Blythe 90055. Butter, 59 pounds 6 ounces in 28 days; milk 1115 pounds 10 ounces. Test made from March 28 to April 24, 1903; age, 6 years 5 months; estimated weight, 800 pounds; fed 8 pounds bran daily during six hours per day; no pasture. Property of Robert D. Miller, Los Angeles, Cal.

Oonan 17th of Hood Farm 152433. Sire. Hood Farm Pogis 4068; dam, Oonan's Landseer Wax 88400. Milk, 282 pounds 11 ounces fat, 13,467 pounds; estimated butter on basis

pounds; fat available for butter, 13,320 pound. Prices have heretofore ranged from pounds; churned butter, 15 pounds 10 \$4.75 to \$9 per pound.

It is said that the most valuable acre of land in Lancaster County, Pa., noted for 185 per cent. fat, 15 pounds 1.2 ounces. Test made from May 17 to 23, 1903; age, 4 years Senator J. Donald Cameron's farm, at 10 months; actual weight, 300 pounds. Property of C. I. Hood, Lowell, Mass.

## Agricultural.

The production of barley in the United States has increased greatly within the past few years. It is estimated, in a general low marks and because of the war scare, way, that about two-thirds of the product is good enough for malting purposes, the remainder being used for feeding. Only a small proportion of the crop is exported; in the record year 1898-99 the exports amounted to 23,661,662 bushels, but this was exceptional. The usual quantity of exports in late years is from six million to eight million bushels.

The exports of linseed oil cake from Russia in 1902 were 233,229,516 pounds, against 298,682,352 pounds the year before. The area of the cork forests of Algeria is

estimated to be 562,500 acres.

According to official reports, the wheat barley, potato and turnip crops of 1903 in Great Britain are inferior not only to those of 1902, but also to the average for the ten years, 1893-1902. Oats, beans, peas, man-golds and hay are below the record for 1902, out above the average for the ten years inst named.

According to a dispatch from Kingsto Jamaica, the government of that island intends to make extensive experiments in cotton growing, and to push that industry.

The 1903 prune crop of France is esti-mated at twenty-one million pounds, an in-crease of nine million pounds over the crop of the preceding year.

## Produce Notes

Seed corn is likely to be scarce and those who have any should take good care of it. Planters had such poor success last spring that they will be more than usually careful about the quality of what they buy for this

The hay markets of the leading cities are very quiet, with prices almost unchanged. S. S. Crissey: "Shall we ever learn to pack fruit as do these people on the Pacific coast? Think of making six grades of plums or cherries from the fruit of a single plum tree or cherry tree! Only the skilled touch and practiced eye of girls and women makes possible this fine art of grading and packing fruit. When it reaches the city one glance is enough; it is perfection it-self; criticism is impossible. It is put in the box in uniform layers. The top layer as smooth and even as if it grew there. Such fruit sells itself. With some samples of fruit grown East it was different. Want of uniformity of package and lack of good quality were noticeable. The buyers would oint out imperfections, argue as to price, and the sale, if made at all, would only be made at cut rates."

Boston marketmen when shipping during extreme cold weather wrap the barrels or cases in thick, stout wrapping paper, which comes in very large sheets, and is fastened to the barrel with tacks. This precaution is very useful to prevent freezing during the journey, and should be adopted by country shippers at such times.

It is said that considerable quantities of export, a total of 204 cars. cranberries are in the hands of New Jersey growers, with a prospect of selling them at prices somewhat below the top, as quoted earlier in the season.

Reports from Norfolk, Va., indicate about two-thirds crop of spinach. Kale and brocoli are also short crops. A large creage of potatoes is being planted in that section and further South.

The Armour Company has lost its case recently tried before the Iowa courts, and is fined \$200 for selling colored oleo. The plot. Margaret Donne, a young girl, enters Professor Scott's book is by far the most case hinged on the construction of the word The Ari show that the oleo was not yellow, but merely a few shades darker than pure white. It was decided by the spirit of the law that the substance be not colored in any way, since the use of coloring matter was without doubt for deception and for no other purpose.

Cabbages are quoted at Richmond, Va. 350 per ton, free from frost.

The fruit growers meeting at Geneva, N ., this week, will include a large display of native fruit and machinery apparatus and merchandise connected with the fruitgrowing industry. There are to be severa hundred varieties of fruit from cold storage Secretary Wilson is expected to be present, and addresses are scheduled from Profes sors Bailey, Taylor and other specialists.

Cabbages have been imported in consid erable quantities of late from Germany and Denmark. The high prices prevailing here have made the business profitable, notwith standing the tariff of three cents per head The foreign cabbage is of excellent quality. nothing but selected heads being shipped The choicest red Danish stock has sold a high as \$45 per ton in New York. Considerable of the native stock arrives frozen at present. Cabbages, both foreign and domestic, have not been so high for a number of years.

Receipts of potatoes at Chicago have been much lighter for the last six months than for the corresponding period of last year. The situation is very strong and some ex-

pect higher prices before spring. Grapes and cantaloupes have been place on the Boston markets imported from France, also cauliflower and escarole.

The supply of eggs in New York cold storage is not more than half what it was at this time last year. The prospect for the owners is very good, so long as the prices and receipts of fresh eggs remain at the present level.

Dry beans are lower in both Eastern and Western markets. The decline is slight and is owing to dull trade and ample supplies. The year's grain exports from Boston show a falling of of 2,632,258 bushels, as compared with 1902. There has been a large ent of corn, but the wheat movement has been out in halves.

The California orange crop is estimated this year at thirty thousand carloads, or six d carloads in excess of the crop in

In Florida strawberries are ripening small shipments going forward. Prepara-tions are being made for spring gardens and for planting Irish potatoes. Citrus trees are in good condition, and shipments of fruit have increased somewhat. Cane grinding and potato digging are practically over. Small shipments of vegetables are going forward from extreme Southern sections, where activity in planting and transplanting is greatest.

What is stated to be the highest price ever paid for ginseng grown in the United

ound. Prices have heretofore ranged from 14.75 to \$9 per pound.

It is said that the most valuable acre of able."



M. A. De WOLFE HOWE,

Author of "Boston, the Place and the People." Published by The Macmillan Co.

spley summary of the stock market at vertising. At the present time there are Cleveland, O.: "Cattle? Don't mention thousands of such men in this country. 'em. No change. Buyers don't want any. Tremendous progress has been made during

The arrivals of fresh beef at Boston have exact science no student of advertising been very large. The total for this week would be willing probably to assert, but was 176 cars for Boston and 180 cars for ex- this much is true,-that American advertisport, a total of 356 cars; preceding week, ing is more nearly approaching a science 125 cars for Boston and 120 cars for export, with each year, and that it is perfectly a total of 245 cars; same week a year ago, feasible to formulate general laws to which port, a total of 356 cars; preceding week, a total of 245 cars; same week a year ago, 119 cars for Boston and eighty-five cars for

## Literature.

SACRILEGE FARM.

is related by Mabel Hart, in her book enconsiderable technical information, have titled "Sacrilege Farm," a story to encor as a rule possessed a broad knowledge tertain but not to take seriously. The of the subject or been masters in the art of honor of a family forms the basis of the writing English. It is safe to say that

Sellers can't sell. And there you are. If these twenty years in the art of advertising. That isn't warning enough to the shipper what does he want?"

That it has as yet been reduced to a science, or that it is capable of being reduced to an all advertising to be successful must con-

During the last ten years a number of books bearing on this subject have been written,—some of them of voluminous size. There has been some good material in all of these contributions, but most of them have been written by advertising men, who, A novel based upon an old-time mystery while able to impart from their experience



"STRAIGHT THROUGH THEIR MIDST KING ALBACORE TORE HIS WAY." From "The Strife of the Sea," by T Jenkins Hains Copyright 1903 by The Baker Taylor Co.

the service of the Silvesters, a family with scholarly contribution to the literature of a mystery, commonly thought to shelter a murderer under their roof. Margaret, now written by a man whose occupation is outa serving maid, finally becomes a keeper of the family secret. The dead man's widow is guarded in the lonely house by the stern, unyielding father-in-law, and the surviving ther of her dead husband form the central figure around whom almost every scene of action centres. The serving maid, Margaret, keeping her simple religious faith, is faithful to Mrs. Silvester to the end, al-Appleton & Co. Price, 50 cents.)

" It is estimated that the business men of

side of the advertising field, but yet who range of investigation into the operations of the mind covers all those mental activities which it is the aim of all advertising to excite. It is a work of a much broader character than any of its predecessors. The average advertising man if asked if his work were conducted according to the principles of psychology, would probably inquire "What the dickens is Psychology?" But a perusal though she has passed many unhappy the dickens is Psychology?" But a perusal hours, due to the fact that she was the custodian of so many secrets. The conclusion of the story leads one to wonder than the application of the essential principles of psychology. Though written from obscure on some points. (New York: D. science, the book contains a great deal of vertiser. It is in short a book that any man devoting his time to this work cannot afford fat, 13,467 pounds; estimated butter on basis of 85 per cent. fat, 15,844 pounds; fat lost in skimmilk, buttermilk and samples, 147 pounds of the dried roots at \$11.50 per la year in printed forms of advertising.

States was recently received by a grower at the business men of devoting his time to this work cannot afford at considerable distance, the result being that at last the young leaves were all stripped from the pounds of the dried roots at \$11.50 per la year in printed forms of advertising.

pound. Prices have heretofore ranged from \$3.75 to \$9 per pound.

It is said that the most valuable acre of of land in Lahoaster County, Pa., noted for its fertility, is the acre of cress on former its fertility, is the acre of cress on former its fertility, is the acre of cress on former its fertility, is the acre of cress on former its fertility, is the acre of cress on former its fertility, is the acre of cress on former its fertility, is the acre of cress on former its fertility, is the acre of cress on former its fertility, is the acre of cress on former its fertility, is the acre of cress on former its chapter of, Professor Scott's book. Whether they are literally true, it would be impossible to say, but one is safe in venturing the assertion that they are approximately true. The sum of money apent annually for advertising in the United States is inconceivably large, and the proportion of its absolutely wasted its far from small.

Provisions Higher.

Prices of beef and pork have been working upward as a reaction from the recent is inconceivably large, and the proportion of its absolutely wasted is far from small old marks and because of the war scare, which has caused large orders from abroad, and the expectation of further demand. Recomplete the account of the complete thands, and that treatises of intended it merely for a magnificent private been having a hard time since the prices began to go down. Here is one reporter's began to go down. Here is one reporter's the control of the preparation of ad-"The Art of the Pitti Palace," by Julia artists now represented there are de-scribed with a fullness that shows an artistic understanding of the subjects discussed though there is no over elaboration of technical details that would produce weariness. A more comprehensive and yet concise view of this treasure house of artistic excellence could hardly be presented. The quotations from art critics and commentators are always illuminative and suggestive, and, indeed, the volume displays unusual aptitude on the part of the author in selecting matter that will emphasize her own ideas. The illustrations from works of distinguished painters are harmonious additions to the text, not forgetting the frontispiece repre-senting Raphael's Donna Velata. (Boston:

## Dopular Science.

-The crushing strength of rocks indicates that there must be a limit to the possible height of mountains. Mr. E. H. L. Schwartz calculates that the lower layer would be crushed in a col-uma of wet sandstone from two-thirds of a mile to five miles high, one of granite from four to seven to nine miles.

L. C. Page & Co. Price, \$2.00 net.)

-In India the town of Karachi and its suburi on, two or three miles distant, are curiously threatened with separation by the growth of sand hills. Mr. R. D. Oldham traces the growth of these dunes from small oval patches of sand on the stony surface, and shows that ever sand on the stony surface, and shows that even a slight deposit may gradually deflect the air currents and produce a calm space and an eddy of slowly increasing size, with steady enlarge-ment of the sand accumulation. Planting native

grasses is among the remedies to be tried.

—The greatest authentic flight of a —The greatest authentic flight of a carrier-pigeon is given by Maurice Dusoller as 1300 miles, the greatest long distance speed as fifty-eight miles an hour for 617 miles.

—The biological treatment of sewage has been studied for a number of years at Han by Dr. Dunbar. The various processes of this kind depend upon the removal from solution of the putrefactive matters through absorption by porous material, and upon subsequent oxidation by micro-organisms. Without the activity of the organisms absorption soon ceases. The absorption, which increases with the fineness of the material and usually attains the maximum effect in four to six hours, proves to be a purely surface action, independent of chemical attrac-tion, and so powerful is it that sterile clinkers in contact beds withdraw from the liquid not only coloring matters, but also the complex nitrogenous substances found in sewage. An interest-ing example of absorption is furnished by Dr. Dunbar's percolating filter, in which one-half of

the purification takes place in the six-inch layer of fine material on the surface.

—An alarm clock for the deaf is an interest-—An alarm clock for the dear is an interest-ing bit of work by Tommy Stringer, a blind, deaf and dumb scientific student of New York. The alarm attachment utilizes several means of awakening the sleeper. It shakes a pillow in his face, it lights a small incandescent lamp having a mirror focussing the rays into his eyes, and it explodes a fulminating cap with a shock perceptible by the deaf at close range. The ap-paratus may also serve as a burglar alarm, or to give indication of fire by electric thermostats.

---The new saccharine plant discovered in uth America contains a considerable quantity of saccharine matter, is not fermentable, and i ing to a height of eight to twelve inches, and its elentific name is Eupatorium rebandium. It UNI STEIN EDIESIANS It was discovered by the director of the Agricultural Institute at Asuncion, and his experiments indicate that the sugar yielded is from twenty to thirty times as sweet as ordinary cane or bee

The radium industry is rapidly developing in France and Germany, and even at nearly \$2000 per gramme, orders are at hand for several hundred grammes. In medicine its effects are most extraordinary. A small glass tube, taining a little more than a thousandth gramme, takes the place of a powerful electri apparatus, and in cancer treatment give results surpassing those of Roentgen rays.

—Describing volcanic phenomena, Prof. E. J. Garwood of London divides the eruptions into two classes—paroxysmal and fissure. The Glant's Causeway is an example of paroxysmal eruption, and the fissure type was represented in New Zealand in 1883, when the famous pink and white learness were destroyed. The open water white terraces were destroyed. The cone varies much in shape, the crater ring of Vesuvius illustrating the perfect one. The preliminary earth-quakes indicate that eruptions are an effect inquakes indicate that eruptions are an effect in-stead of a cause, and these three theories may be given first, the dissociation of water into its constituent gases, which were recombined out side St. Pierre by lightning; second, the disasse ciation of sulphuretted hydrogen; third, the dis-charge of water, which has existed in a spheroidal state mixed with incandescent ash.

-Renewed interest in the influence of sur spots has been aroused by the great magnetic storm of Oct. 31 and Nov. 1, which was one of the severest disturbances of the kind on record. The large group of spots on the centre of the sun's disc at the time was surrounded by an immense tract of very bright faculæ, and, as the larger group of spots of Oct. 11 scarcely affected the magnets, M. Quenisset has suggested to the Paris Academy of Sciences that it is the prominences and faculæ rather than the spots that are so closely connected with terrestrial phe nomena. This conclusion may throw light upon a report of Mr. W. E. Maunder to the British Astronomical Association. Mr. Maunder has been trying to trace the relation between sunoots and rainfall, but a comparison of vecords nee 1862 has falled to show that any particular phase of the sun-spot cycle is asso ne rainfall.

—Only fifty-four per cent. of Germany's young men are fit for military service. Dr. Stricker finds that heart disease has increased three hundred per cent. in a decade.

—Human power and machine power are found by Professor Schmoller of Berlin University to have been equal i. Germany in 1850 when the population was eighteen million, one, when the population was eighteen million, oue, half being laborers. In 1895, with apopulation-of fity-six million and the same proportion of laborers, the machine power had reached six times the manual, or, according to some authori. ties, ten times.

—The hour of death bas been recorded by a leading European physician for 2880 persons of all ages. Deaths are most numerous between five and six o'clock in the morning and fewest between nine and eleven in the morning. The death rate is not large between 10 A. M. and 3 P. M., the fatal hours being from 3 to 6 A. M.

—While strong plants destroy weaker ones by crowding, or by depriving them of air, light or food, it is rather surprising to hear that one plant may poison another. In a recent case reported in Engiand, the plant called Humes elegans, which exhales a powerful odor of Russia leather, -The hour of death has been recorded by

in England, the plant called trumes elegans, which exhales a powerful odor of Russia leather, was placed in a greenhouse near a peach vine, when the nearest leaves of the latter began to wither and fall off. The influence was felt even at considerable distance, the result being that at

## **DEVONS**

For want of stabling I offer, at very low prices, my First-Prize two-year-old Bull Hamlet and a number of Females of various ages. Or, the will sell my entire Show Herd to any single purchaser. JAMES HILTON, Slingerlands, N. Y.

## SHROPSHIRES.

THE GOLDEN-PLEECED—AMERICAN SHROP.
SHIRE REGISTRY ASSOCIATION. The Largest LIVE STOCK Association in the World. Sixteen Vols. of Record published. I Shropshire Record recognized by the Unit Government and Dominion of Canada to toms. Registered Shropshires are the most sheep in the Universe. Slanks free. Sheep in the Universe. Slanks free. Lafayette, Lafayette, Lafayette, 1

## HOLSTEIN-FRIESIAN ASSOCIATION OF AMERICA.

President, Henry Stevens; Secretary, F. I. ton, Putney, Vt.: Superintendent of Advancetry, S. Hoxle, Yorkville, N. Y. To Members.—Males, \$3: females, \$1. females, \$1. females, \$2: females,

Life Membership, \$25. Advanced Register in charge of Supt. Has above, who will furnish all information and therefor.

Address F. L. HOUGHTON, Putney, Vt., formation relating to Registration of Pedigree.

## Ayrshire Breeders' Association

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President—George H. Yeaton, Dover, N. H. Secretary—C. M. Winalow, Brandon, Vt. Treasurer—Nicholas S. Winsor, Greenville, R. F. Hianks for Registering and Transferring Ayrahre Cattle furnished free. The Year-Book for 1986 furnished free. Private Herd Registers for Seventy-Five Cons. \$8.69, postage paid; Monthly Milk Records for the Stable, good for M cows, price, \$1.50 per 100; Banks for extending pedigree to five generations, \$1 per 100; All the above may be obtained from the Secretary. Fees for Registering.—To Members, \$1 for each entiry of animals under two years old, and \$2 each for animals over two years old. Transfers, \$2 cents each. Duplicate certificates of either entry or transfer. 50 cents each. Double the above amounts in each case to Non-Members, 110 each case to Non-Members. Herd Books, Voume 1 to 14, may be obtained from the Treasurer—\$2.20 each, postage paid.

### American Jersey Cattle Club. OFFICES-8 W. 17TH ST., NEW YORK,

resident-Elmer A. Darling.

Blanks for Registering and Transferring Jersey Cattle; also Blanks for Private Butter Tests o Registered Jersey Cows, furnished free of charge upon application to the Secretary.

Foes for Registering: To non-members, \$2 each head, male or female. To members of the Club, \$2 each head, male or female. All animals over two years old, double fee. For registration of all dead animals, \$2 each. Imported animals, \$25.

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Polytone of Butter Tests from Aug. 1, 1898, to July &, 1902, \$1.

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Temperance St., Toronto, Canada. Affiliated with the University of Toronto. Patrons—Governor-General of Canada and Lleut.
Governor of Ontario. The most successful Veterinary Institution in America. All experienced teachers. Fee—Sixty-Five Dollars per Session. Session begins Getaber 14th. Apply to Principal.

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R. Lilburn, Emerald Grove, Wis., breeder of the best strains of Aberdeen-Augus cattle. Established 1882. Also registered Shetland ponies.

Champion Herd, 1900, 1901, 1902. Of up-to-date prize-winning Chester Whites. This serd won more prizes in 1800, 1801 and 1802 than any Thester White herd in the world. If you want stock from this herd write.

J. W. DORSEY & SONS, Perry, Ill.

Chester Whites. Buy your stock from the old 'reliable herd that has roduced more prize-winners in the past 19 years than ny other herd in the United States, M. E. NEWBURN, Hennepin, III.

50-Chester White Bonrs-50. Eight fail of 1902 farrow, 42 of spring of 1903 farrow leavy bone, extra quality. Breeding most fashion-ble. Pairs and trios not akin. Also some extra F. A. ECKSTEIN & BRO., Chester, Howard Co., la.

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To reduce Herd to capacity of pasture, will sell a imited number of A No. 1 YOUNG COWS

of high breeding and individually right, large pro-ducers, at \$130 each.

Also 15 BULL CALVES at bargain prices.

STEVENS BROTHERS, Laconia, N. Y.

## HOLSTEIN BULL CALVES.

roughbred, four High Grades, 3 to 5 months udsome, healthy, fine growers, the produce refully selected Dairy Herd. For Sale at prices. Harcourt Farms, Gambler, Ohie.

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A few choice Young Bulls and Bull Calves for Sale of
the Florine and Elya families, sired by Supreme, the
Champion Bull at the New York State Fair, 1991 and
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GEORGE T. HUBBLE, Manager.
Solvay, N. Y. F. R. HAZARD, Owner.

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Home of Lella Pletertje, 7. hs. 5 oz. butter in f days, A. R. O. Two Sons, two Daughters and many others, closely related to this great cow. A.ya minan in Herd for Sale. GEO. T. Menell, Theresa, N. Y.

Woodlawn Herd Aberdeen-Augus Cown Heifers and young buils for sale. Also Duros-Jer-ey and Chester White hogs for sale. BENTON GARINGER, Washington C. H., Ohio.

Maple View Herd Aberdeen-Angus Cattle—40 registered bulls and eifers for saie, sired by Fond Lad 3227. JOHN L. GAISER, Charleston, Ill.

Chester Whites.

A fine lot of March pigs. Pairs and tries not akin W. D. HOWLAND. R. F. D. No. I, Reddick, Ili. Write for show record of our

## Chester Whites.

All ages for sale.
ribe what you want.
HARDIN BBOS., Box P 160, Lima, O.

50 Chester White Pigs Of March and April farrow. Pairs and tries not related. Pedigrees furnished. Herd head-d by Silver King 9125. W. R. GATES, Ft. Atkinson, Wis.

75 Chester Whites, May farrowing. Pige not akin. Pedigre. Write F. A. NORTH, Cambridge, Wis.

Helle! entral No. 45. G. C. VOGE, JR., breeder of the p-to-date EXCELSIOR HERD OF DUROCS, West

Durec-Jerseys. We breed the large, growthy, heavy kind. Springs of either sex now ready to ship.

I. J. LORTON, Union City, Ind.

Duroc-Jersey Pign. March and April farrow, both sexes, unrelated. C. C. McCUTCHEN, Canton, III

## Sunny Side Herefords

The oldest established and best known herd of erefords below the line. We exhibited the first-rise aged and young herds, and also the champion smales at the san Antonio International Exposition mmune young stock of either sex for sale.

WILLIE S. & J. B. IKARD, Henrietta, Tex.



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## CHARACTER ON HORSEBACK

Many a peculiar sight one sees on horse Did it ever occur to you that a horse mthis condition becomes very much lated. The saddle with its weight back. Under the bridle and straps le sore and chafed spots. Soothe and by the use of Glosserine. Article value in a stable.

### Douttry.

A Study of the Egg. The Maine station has been making a careful analysis of the eggs of domestic fowls, turkers, geese, ducks, guinea fowls and

weight of the eggs.

on hens.

hens' eggs gave 11.2 per cent. for shell. key eggs an slightly above hen eggs in this respect, having an average of 11.4 per cent. of the whole weight. The shells of the goose eggs averaged

12.8 per cent. of all. Guinea fowl eggs should be unusually strong, as their shells form 14.4 per cent. of

their weight. The whites of the eggs in proportion to their total weight ran: Goose, 52.6; duck, 53.6; guinea, 53.6; turkey, 56.5.

The proportion of yolk to the whole egg ran: Guinea fowl, thirty-two: duck, thirtythree: goose, 34.6; turkey, 30.1. About seventy per cent. of the edible

portion of eggs is pure water. The protein content is about fourteen per cent., the fat about the same. This makes eggs a very valuable food.

Nost of the protein is in the whites of eggs, and most of the fat in the yolks.
Taking the eggs as a whole, including the shell, the fat content ranges from about nine per cent. in turkey, hen and guineafowl eggs, to over twelve in the eggs of

ducks and geese. The protein content runs from eleven to thirteen per cent. in eggs of all varieties of fowls named. There is really little difference in the nutritive value of the different

## Cost of Making Eggs.

in the seventeen weeks from Dec. 1, 1901. to March 29, 1902, and in the similar period of 1902-3, in twenty-nine flocks representing ten owners and 5200 fowls, testing under direction of the Cornell Experiment Station, the average daily production of eggs was 22.8 per one hundred fowls.

During the same period the average food cost of one dozen eggs was nearly eighteen (.177) cents. The flocks that laid most eggs during December and January laid most eggs also in March. The egg production of pullets was notably in excess of that of hens particularly in the earlier periods when the price of eggs was highest.

The average cost of feeding one hundred hens for seventeen weeks was \$35.33. The average value of product exceeded the cost of food by \$16.13 per one hundred fowls. The summary shows that with all the five thousand two hundred fowls, the average daily production during thirty-four weeks was one egg to nearly five birds. The average cost of all the eggs (151,615 in number) was about one and one-half cents each.

the very severe weather which is now prevailing all over New England, and, in fact, all over the poultry-producing sections of the West as well. We anticipate that these conditions will prevail for some time to come. Fowls are very active from 13 to 14 cents; selected large chickens, soft meated, are quite short and sell readily at 20 cents; medium-sized and small chickens are more plentiful and selling from 15 to 17 cents. Turkeys are getting quite short, receipts are very limited, any fancy New England stock would sell from 22 cents upward. Ducks also continue very active at from 16 to 18 poultry remains practically unchanged; fowls and chickens are selling all the way from 12 to 13 cents, and it is generally understood that present conditions will prevail on poultry so long as the weather continues severely cold as it is now.

The Market Seasons for Poultry. P. H. Sprague: "The best season in which to sell chickens is from the first of January to the first of November. Every farmer seems to want to dispose of his poultry during November and December, and consequently the market is always overstocked at that time. The surplus oung roosters should be sold during September and October, as they will bring more money then than later. If it is impossible to market them until after that

me, it is best to hold them until after the st of January, for prices are always low during the intervening months. Turkeys are most salable around the holidays. Old arkeys and large, young gobblers should marketed for Thanksgiving and Christthe market. All should be well fattened efore being shipped. The hens and small, ang gobblers should be kept until after holidays, but should be marketed by the st of February.

Capons sell best from the first of January to the first of March, and generally bring 8 cents to 15 cents per pound. The

of March to \$6 or \$7 per dozen during April and May. About the first of July they will, as a general thing, bring from 20 to 25 cents per pound, the price gradually going lower. Chicks should weigh from 1½ to two pounds each the first of March, and as the season advances from two to 2½ pounds each. They advances from two to 2½ pounds each. They should be shipped alive from the first of March until the first of November."

## borticultural.

Foreign Apple Trade.

James Adams, Son & Co., Liverpool For anything absolutely reliable, the tendency is certainly for higher prices, but the presence of frosts is always detrimen-tal, as buyers are at once on their guard, and operate with caution. Most of the Canadian stock, both by the Bavarian and Cambroman, was affected to a more or less extent, some lots being especially bad, and even at the very low prices quoted clearances were effected with difficulty. This is very unfortunate, as shippers must have lost heavily on these shipments, but as more care will, no doubt, now be taken in con-veying stock to the seaboard, it is to be hoped all possibility of damage may be avoided in future.

"Choice Maine Baldwins appear to be wanted as much as ever, and if quantities from this forward are only kept within the k eggs seem to have the thinnest requirements of the market, there is every being about 10.6 per cent. of the holidays. Indeed, the recent moderation of average of thirty-four samples of shipments has been most opportune, as the country will now have an opportunity of working off the recently acquired stock, in-ducing renewed activity with advent of the towns has been very disappointing so far, but now that the fruit is beginning to show more color, it is expected that the demand

for them will improve."

The total apple shipments to European ports for the week ending Jan. 2, 1904, were 66,970 barrels, including 18,542 barrels from Boston, 11,004 barrels from New York, 17,-886 barrels from Portland, no barrels from Montreal, 18,095 barrels from Halifax and 1443 barrels from St. John, N. B. The total shipments included 32,738 barrels to Liver-pool, 21,223 barrels to London, 4168 barrels to Glasgow and 8841 barrels to various ports. The shipments for the same week last year were 50,707 barrels. The total shipments since the opening of the season have been 2,546,141 barrels, against 1,751,024 barrels for the same time last year. The total shipments this season include 459,458 barrels from Boston, 853,838 barrels from New York, 171,546 barrels from Portland, 728,132 barrels from Montreal, 289,806 barrels from Halifax, 28,703 barrels from St. John and 14.658 barrels from Annapolis

## Advancing Grain Markets.

The abundance of war news during the week has caused the grain markets to show somewhat irregular prices. It is expected that the Japan-Russia war would increas the foreign demand somewhat, and prices have varied somewhat according as prospects were threatening or not at the time. The quotations closed at time of going to press higher on wheat, corn and oats. A great many dealers, possibly the major

ity, are of the opinion the corn yield this year will not be much, if any, over two billion bushels, or, say fully five hundred million bushels under the 2,523,000,000-bushel crop of last year. Many outsiders wonder at the smallness of the supplies at terminal points and the continued meagreness of the country marketings, having in mind apparently only the magnitude of the 1902 crop. They seemingly ignore the one billion bushels deficit compared therewith of the 1901 crop of 1,522,000,000 bushels, and the resultant extraordinary depletion amounting to practical exhaustion of re-serves at the end of the season 1901-02. The various cattle feeds have not varied

much in price of late, but corn meal has gone up one cent per hundred pounds. Except in the event of an important foreign war, there appears no reason to ex-

kinds. This is partly on account of the cold weather. The average of prices has light receipts brought about probably by the standard vegetables that sells below last | mums will bring more than ten dozen poor quotation and most sorts are a peg or two ones. Another thing comes before we get

take care of the supply. Cabbages are searce, but not quotably higher than last quoted. Squashes are a peg higher, best Western Hubbards bringing \$50 per ton. These have been low all the fall and early winter, too low in relation to the supply.

Experience is the best teacher, and a grower often wonders why his neighbor gets more for his flowers than he himself gets even though they both sell through They are likely to be high the rest of the season. Onions are in moderate supply and seem to be working higher. Potatoes are very firm at present prices and should be cents; geese are somewhat firmer and sell- higher by next week in sympathy with New ing from 13 to 14 cents. The market on live York and Western markets, which have been advancing of late.

Southern stuff is still scarce and high. The recent cold snap appears to have ex-tended well to the South and will probably affect both the quantity and condition of future shipments from that section. The Southern vegetable growers made a great deal of money last year. The two recent freezes are giving them a setback, but our correspondents report preparations for an active season. There will be larger plantings than were made last year, and Northern markets are likely to be overloaded at the height of the season unless a late freeze intervenes.

Hothouse vegetables are selling at good prices. The cold snap made some very lively work for those who had cucumbers and tomato houses to be kept at the required temperature. It is fortunate that there is no coal famine this year. But even at present prices of coal, the high temperature hothouse specialties cost a good deal of money toraise. The margin of profit on vegetables produced during the season of short days and long nights is much less than for the later crops, selling prices being supposed to be the same.

## Money in Mushrooms.

Mushroom growing is one of the lates fads that has struck Washington, says the New York Herald, and interesting stories are told of the financial results of this



DRAWING WOOD IN IANUARY.

Timely winter work. The boys are a good part of these loads, and they enjoy it better than a sleighride.

new year. The trade for California New-towns has been very disappointing so far, rooms. The cost of the bed is about \$8. The growers receive seventy-five cents a peck for the best and sixty cents a peck for the second grade, the size and quality de-termining the price. He figured out that three women of his acquaintance were clear-ing each about \$55 a month out of mush-rooms grown in the cellars of their homes.

The marketman said a good cellar was the best place to raise mushrooms. He said the things necessary to success were few. First, the cellar in which they are to be grown must be kept at a temperature of about 65°. and should be well ventilated, and arrangements should be made to have the soil moist.

Goed manure, rich in phosphate, must be used to form the foundation of the bed, which will be built preferably upon a dirt floor. Two loads will be necessary for a bed fifteen feet long. The mushroom spawn can be procured in the shape of bricks from the florists and nurserymen. The tempera-ture of the bed must be tested and no plant-ing must be done until it is below 95°. Then the bricks can be broken in half-inch eces and distributed evenly over the bed.

## Raising Blueberries.

One of the great drawbacks to popular cultivation of the blueberry is the difficulty of propagation. While it grows readily from seed, the young seedlings are so minute they are very easily destroyed. and they grow very slowly. It does not grow readily from a cutting, and if about forty or fifty per cent. of the cuttings made produce plauts, the propagator considers himself fortunate.

The plants may be quite readily divided, however, and if the individual bushes which are brought in from the wild lands are carefully separated and planted in a rich garden soil, or in a soil which would be suitable for corn or potatoes, there is no reason why the crop should not succeed. In the wild state the blueberry is much superior to the raspberry or blackberry or many other small fruits, and I see no reason why, in the near future, this fruit should not be added to the list of those recommended for garden culture.—Prof. W. M. Munson, Orono, Me. which are brought in from the wild lands

## Quality in Cut Flowers

As near as I can learn from what I see in Improved Poultry Markets.

Reported for this paper by S. L. Burr & Co.: The market on poultry since our last letter has changed quite a little; prices are ruling considerably higher on nearly all before the solution of the short supply, partly because of the extreme short supply. to the packing. Eleven No. 1 chrysanthemums and one "ringer" does not make a a dozen first-quality flowers. The same

gets, even though they both sell through the same broker. It is simply one of two things. The one who gets the money is the man who never cuts a flower until it is just right; never tries to push through a few "seconds" with a lot of fine stock and who is liberal in his judgment in regard to the requirements of the time of year, as to the proper boxes, paper, twine and sundry items that put his flowers before the buyer in the best possible shape. That is why he gets all there is to be had; but his neighbor would not believe this, even though he stood in front of the counter when the stock was sold .- E. E. Pieser, Chicago, 111.

## Current Happenings.

The Rev. John Cotton Brooks in his sermon at Christ Church, Springfield, on Sun-day, when he gave a history of the church for the quarter of a century he has been in charge of the parish, paid a fitting tribute to his wife by saying: "Your hopes, your fears, your joys, all were hers in those early days, and at last, wearied by the greatness of the way, she left your sight to rest awhile in the Lord, and to wait patiently

for Him to bring strength back to her.
. . . For all that I have been able, with God's help to be to you, as you count it, has been what she has been to me of example, of inspiration, of courage and of faithful burden bearing." Mr. Brooks reminded his people that it was a ministry from the sick-room of the rectory that they received, and that he endeavored to give the gospel of Christ as it had first been preached to him by Mrs. Brooks in the home.

The recent celebration of the eightieth

at the market, a fifteen foot bed will grow side on this occasion. She is nearly five work was diverted to her personal use. She years older than Mr. Higginson, and is one of three remaining intimate former com-panions of Emerson, Holmes, Whittier and Longfellow. The two others are the Rev. Dr. Edward Everett Hale and Thomas Wentworth Higginson, and they are all oldtime contributors to the Atlantic Monthly

> The Out-Door Art League of California are working earnestly to have the Government buy the Calaveras grove of big trees for the purpose of turning it into a national park. Their bill has passed the United States Senate twice, but it was not viewed favorably by Speaker Henderson of the House. Now it is hoped that Speaker Cannon will give the metre a hearing. It is non will give the matter a hearing. It is feared that as the lumber mills are creeping closer to the grove all the time, the trees which are the largest and oldest in existence may eventually fall beneath the woodman's axe. Other associations besides the society mentioned, including the Cali-fornia Club, the Native Daughters and the Chamber of Commerce, are interested in the movement.

A character factory is the not very dignified but expressive name which is given the Millard-avenue Presbyterian Church, Chicago, which proposes under the direction of the Rev. Granville Ross Pike and his wife, and the entire congregation, to adopt a systematic method of reforming character. According to the pastor, although the so-ciety is called Presbyterian, it will be nonrecreations and physical exercises, and will be attractive to the eye from an artistic "What standpoint. Each week, we are told, a special sin, failing or weakness will be dis-cussed, and a lie in any form will be called labor to east out his own bad brick, but will assist his neighbor in dislodging his. An entire week will be given to searching for one particular poor brick, and every second month there will be a review of all back in business and retard his success. As the church is being built with voluntary offerings, stinginess is, of course, considered an imperfect brick that must be removed before the character can approach a truly Christian standard. Mr. Pike, by the way, considers himself a friend among friends. and not simply the pastor of a flock, and all his followers are expected to labor for the individual and the general good. All this appears to be a trifle Utopian, but it is an effort in the right direction. It is to be prayed, however, that it may not degenerate into Paul Pryism. The brick, impertinent curiosity, must be looked after as well as the other poor bricks.

The Rev. Walter C. Roe, a nephew of E. P. Roe, the novelist, is helping the women and girls of the Cheyenne and Arapahoe Indian tribes in maintaining a successful industry. He is a missionary of the Dutch Reformed Church, and he is assisted by Mrs. Roe, a cultured Boston woman. When they went to the Mohonk Conference of Indian workers about five years ago, they advocated the revival of Indian beadwork, so that the squaws of southwestern Oklana might find profitable employment, and the result was an instant collection of money to build Mohonk Lodge, a substantial one-story building containing a large salesroom, where all kinds of Indian curios and beadwork are exhibited, and a workroom and other apartments for the matron and her assistants. At this lodge an Indian woman can find employment at any time, for there is a steady demand for the work it turns out. It has about one hundred women who receive employment through this agency, and make reasonably good pay without neglecting their domestic duties The Indian women are not shirkers and most of them have been used to a life of toil. The experiment has, indeed, been so successful that sub-stations will be estab lished at other places in Oklahoma.

emorial tablet of marble and brass to Mrs. Rebecca Salome Foster, the "Tombs Angel," was unveiled by the City Club in New York, on New Year's Day. It conare will of sense per pound. Here is a large demand for mushrooms, there is a large demand for mushrooms, which will increase as the people come back that weigh less than seven pounds each will bring no more than the price of common chickens.

"Live geese sell best in September and the general period of the dessence and mountains and take the first of December to the first of March to the first of March to the first of March to the first of July, he highest price being obtainable from the first of March to the first of July, and the remainder of the season by the pound. They generally bring from \$3 per dozen the first of July, and the remainder of the season by the pound. They generally bring from \$3 per dozen the first and the proper will appears that the maniversary of the birth of Thomas Wenth Higginson brought to mind his work the maniversary of the birth of Thomas Wenth Higginson brought to mind his work that maniversary of the birth of Thomas Wenth Higginson brought to mind his work which will increase as the people come back that weigh less which will increase as the people come back which will increase as the people come back the first of December to the first of March to the first of March to the first of July, and the remainder of the season of the first of July, and the remainder of the season by the pound. They generally bring from \$3 per dozen the first of saming. It appears that the brother hand, there is an accumulation of farming. It appears that worth Higginson brought to mind his work which will increase as the people come back the bring the maniversary of the birth of Thomas Wenth Higginson brought to mind his work that maniversary of the birth of Thomas Wenth Higginson brought to mind his work the first of March to the first of July, and the remainder of the season or an are former and philanthropist as well as litterature. He has, in miversary of the birth with the first of March to the first of March to tains a portrait of Mrs. Foster and the

never sought publicity, and the reporters refrained as much as possible from making newspaper "stories" about her. She lost her life in the Park-avenue Hotel, two years ago, in attempting to assist others, when she might have escaped with safety.

In her will Mary C. Converse of Malden carried out the practical charitable ideas that marked her generous life, and in her beuests of a public nature the Malden Home for Aged People receives \$2000, the Malden Industrial Aid Society \$2000, with \$1000 additional for its day nursery, the Malden Hospital \$2500, the Malden Public Library \$15,000, a permanent fund, the income of which is to be used for purchasing works of art; the Home for Aged Couples, Rox-bury, \$2000, the Woman's Charity Club Hospital, Roxbury, \$2000, the Cambridge Baptist Home for Aged People \$2000, the Industrial Home for Crippled Children \$1000, the Burnap Home for Old Ladies of this city \$500, and the Boston Children's Friend Society, \$500. Verily, the poor have reason to rise up and call Mrs. Converse

## The Saunterer.

The Christmas holidays and the accompanying presents brought out many funny remarks and incidents, and the comments on the gifts received sometimes partook of disgust rather than of thankfulness. One young man of my acquaintance received from his sister a handsome manicure set, sectarian, and all denominations will be and as she beamed with joy expecting to welcomed to its benefits. The church will be rewarded with a smile and a grateful afford opportunities for various kinds of acknowledgment, he contemptuously ex-

"What do I want that thing for; I've got it all in my pocket-knife now."

Then he threw the gift into the bottom of a drawer where he keeps odds and ends, and it will not be seen again probably until

there is a housecleaning or a remove. The suggestions of those who viewed other people's presents were also amusing and sometimes annoying. One hobbledehoy met with a rebuff that he did not expect when he asked a chum how he liked the new neckscarf that had been given him

by his father. Take it off," was the reply, "it looks

like a stair carpet!" The old gentleman's taste evidently did not come up to the youthful standard of haberdashery, and was not strictly up to date. It was something that needed to be walked over.

This reminds me that during Christmasof eight upon a new sled, and they both seemed to be enjoying themselves hugely. I remarked to my young nephew, aged twelve, that there was an exhibition of brotherly devotion that is seldom seen

nowadays.
"Ha, ha," he laughed in return, "that isn't his sister; it's some other fellow's sister."

"How do you know that?" I queried. "Easy enough," was the response.
"Didn't I see him kissing her when she rolled off into the snow a minute ago? Fellers don't do that with their sisters, you

I said nothing more to the youthful philosopher and observer, but I marveled at the precocity of the present age, and thought of Dickens' little couple in " Boots at the Holly Tree Inn."

Christmas at the various settlements was elebrated with great rejoicing by the mites that came under the care of the good women and men who devote their spare time to making the poor happy and comfortable, and at one of these oasis in the desert of struggling humanity in New York, with which I am familiar, a Russian boy was marching along with a mixed expression of joy and pain upon his countenance that bore evidences of a recent feast. As I approached him with a young lady frienda ministering angel, by the way-she said to the urchin:

"Where did you get that lovely drum?" And he answered in the genuine Gotham mode of expression among the East Siders. "Ob, I got that off Santa Claus. I've got belly-ache, too, and I got that off the ice-In this connection one is reminded of

Byron's lines: "There rolled no day, there rolled no hour

Of pleasure unembittered,
And not a trapping decked my power
That galled not while it glittered."

And so with the roll of the boy's drum there came another kind of a roll that disturbed his juvenile happiness.

—Forty years ago the negroes of the South did not own a square foot of ground, nor a roof to cover them. Now, on the other hand, there are 130,000 farms owned by negroes, valued at \$350,000,000; 150,000 homes outside the farm town-

world's production of gold in 1903 passed the \$300,000,000 mark, and probably exceeded that of the record year 1869. The principal gain has been in the Transvaal, which is recovering from the interruption of the war, its output rising from \$35,000,000 in 1902 to \$55,000,000 in 1903. Australia leads the list of gold-producing countries with about \$88,000,000. Production in the United States was \$60,000,000 over and above the amount consumed in the arts, the gain in the Treasury gold certificates being \$50,000,000. The total stock of gold in the Treasury is now \$680,000,000.

—Of all classes of banks, there were not less than 18,880 in the United States on Dec. 31, 1903. Of this number there were 5158 national banks, 844 savings institutions, 4008 private banks and 8873 State banks and trust companies. During the year 1903, the new banks of all classes averaged over five per day, the precise number of banks added to the whole system in 1903 amounting to 2177. ng to 2177.

banks added to the whole system in 1903 amounting to 2177.

—Hezekiah Scammon, a prominent citizen of Exeter, N. H., died Dec. 29, from a stroke of apoplexy at the age of sixty-one years. He was a zealous and prominent member of the Grange and took a leading part in the organization of East Rockingham Pomona Grange, having been chosen its first master. He was the retiring master of Gilman Grange. Mr. Scammon has left, beside the widow, two sons, Everett of New York, and James of Boston. In Stratham, N. H., he leaves a brother, Col. Richard M. Scammon, and a sister, Miss Sarah C. Scammon.

—Reports relating to the internal commerce of the United States for eleven months ending with November, as presented by the Department of Commerce and Labor, through its bureau of statistics, show in general that staple commodities at primary markets have thus far this year held their own compared with the movements of 1902. Grain and live stock receipts at leading centres have, as a rule, reached, if not exceeded, last year's level. To the end of November, 7,682,362 head of cattle were received at five leading markets, compared with 6,994,719 head for the corresponding period of 1902 Receipts of all kinds in the eleven months were 29,995,374 head in 1903 and 29,478,442 head in 1902. Receipts of live stock by markets were as follows for eleven months: Chicago 14,146,820 head, Kansas City 4,996,891 head, Omaha 4,779,962 head, St. Louis, 3,469,649 head, St. Joseph 2,712,062 head, St. Paul 1,759,343 head, Sioux City 1,287,974 head. The feeder movement for eleven months last year from St. Joseph and Kansas City reached 1,118,930 head, compared with which 1,171,184 head in 1902 and 783,463 head in 1901.

### Didn't Know How to Do It. GLASGOW, Mo., June 4, 1903.

Page Woren Wire Fence Co., Adrian, Michigan. GENTLEMEN: - Allow me to volunteer a slight

GENTLEMEN:—Allow me to volunteer a slight testimonial for your wire fence.

A short time ago I bought of my brother, J. Watts, your agent here, one and a half miles Page 8-bar 24-inch Hog Fence, and in stretching it up, I had little trouble on smooth, level ground; but much of my ground is rough and broken, and when I struck that, I came to grief. I could do nothing with it, and so sent for a so-called expert. He came, and we worried over it until I was completely disgusted and out of temper. I went to town to see my brother, and fully intended to ask him to take the fence back. I was done with woven wire fence in the hills. It

I was done with woven wire fence in the hills. It would not work.

In town I met first another of your agents, a friend of mine, Mr. O. B. Thompson, who told me that he had just been talking with a Page man, a real expert, and that he would like to introduce him to me and have him hear what I had to say. Accordingly he made me acquainted with a Mr. Gerardy, and after I had told him my troubles, he said he would come out and put up my fence for me. In one day, with a single helper, he took down a half mile of fence, and restretched it over steep hills and deep gullies to my entire satisfacsteep hills and deep gallies to my entire satisfac-tion. It is now a beautiful and firm fence, and am pleased with it.

Next year I shall put up as much more fence, and only Page Fence will answer my purpose. I take pleasure in recommending Page Fence for Very respectfully, WATTS FRUIT FARM.

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"No author calld be more justified in speaking on his selected topic, as one having authority, than is Mr. James in appearing as an expositor of the Angora, for thousands of beautiful specimens of these lovely creatures owe not only their existence, but their excellence, to the skill, care and knowledge of this well-known breeder. The book contains much useful information as to the diet and general care, it being, in fact, a work that is indispensable to any owner of one of the valuable and beautiful animals."—New Fork Fogue.

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cents. Stamps taken. Mention the PLOUGE-MAN.

WALNUT COMPANY, Box 3954, Besten, Mass





Down at Dover there were not enough plumbers to mend the pipes; and this was no plumber joke, either,

Whichever side one may take in the con troversy, there seems to be no reason why Wagner should not employ whomso ever she sees fit to sing at Belreuth. Comparatively few Americans ever get to Bei-

One of the surprises of the "Twelfth Night" performance was the Ben Greet A consistent and well-played Malvolio added unexpected charm to a play that is certainly far from being a convin ing piece of stage writing, even with all due respect to the great name of Shakspere.

One of the most peacefully domestic scenes ever disturbed by the unsympa-thetic police was thus rudely broken in upon the other day in Gotham. The police came to arrest a woman for bigamy. But the woman was away enjoying an afternoon at the theatre, and they only found the the family baby.

A gentleman over on the other side, Mr. Wan Ecke, recently achieved the record of smoking a single pipe for two hours and out refilling or relighting. If the record hadn't been made earlier than the first of the month one might easily imagine that the gentleman had made New Year's resolution not to smoke more than one pipe after each meal.

Little Rhody is getting up quite a correspondence and the three hundred odd letters which Superintendent Lull has dispatched from Newport school children to school children in London are said to be but the beginning. Paradoxical as it may appear, the postal officials are doubtless hoping there will be no lull in the letterwriting now it has started, and that other States will follow the example.

Positively the first sign of coming spring anywhere is the increase of fresh egg receipts from the South during the first part of January. The hen is extremely sensitive to weather changes, and quickly recognizes the turn of the year as indicated by more sunshine and less snow on the ground. The effect takes place in the North fully a month later. Another prophetic sign is the ap-

The new rural mail boxes, with the name of the owner thereon, are a convenience in finding people in the farm districts. Formerly the caller, if a stranger, might climb out of his carriage, open gates, dodge watch dogs and tramp long walks for half an hour before locating the residence desired. Now he who drives may read. Every farm, whether on the mail route or not, should have the owner's name in plain sight from

The tendency of housekeepers to buy fruit in small quantities is likely to grow with the greatly increased variety of such now offered. The quantity of each kind as kept at hand must be limited or part will spoil before it can be used. The small package is the market method of the future, even for the long-keeping fruits. Few city buyers have good cellars or other means of keeping supplies, except for im-

Chicago accident is not altogether a case of in front of the house. On the other hand, locking the stable door after the horse has been stolen. There are other theatres; and there are also laws already on the statute books that if rigidly enforced would probably prevent another similar catastrophe. The big steamship companies keep their fire protective apparatus in condition by frequent practice, and there is no reason why the theatres shouldn't do likewise.

The arctic weather of the past week may bring serious results so far as concerns the fruit crop and even the trees themselves. Temperatures in the vicinity of 40° below zero in counties as far south as central Connecticut are something almost unheard of. Many varieties, even of the usually hardy fruits, are endangered by cold of such intensity. The fairly good covering of snow would somewhat lessen the effect. but fruit growers are naturally somewhat

It looks as if the change in control and management of the Massachusetts Horticultural Society was to be accompanied by infusion of new energy and new ideas. This famous society has resources of more than three-quarters of a million and centres a region unexcelled for the degree of intelligent interest devoted to high-grade products of garden, orchard and greenhouse. To judge from President Walcott's first address, there will be a new period of improvement and progress.

The San Jose scale is looming up as one of the serious problems of the orchardist. In some districts it is becoming a question of spray or lose the trees. We are glad to offer the account of expert Connecticut experience and outfit. Spraying for the scale can be done in winter, but the mixture may be washed off before taking full effect. The better period is just before the leaves start. It looks as if the time is at hand when a great deal more attention must be given to the destruction of this dangerous pest.

One of the interesting facts that comes to the surface in an examination of the recent report of the Elevated directors is that Boston is, perhaps, the only city in the country as no "railroad king." Whitneys, Belmonts and Yerkeses are undoubtedly picturesque magazine material, but to size up the Boston transportation system one has to face the fact of a distribution of stock among over two thousand individuals, more than four-fifths of them being good Massachusetts citizens, with a civic interest in the road as well as a financial one.

All sorts of devices have been invented for preparing milk to endure long journeys and long keeping, but as yet the fresh product does not seem to be displaced to any the aid of a force-pump, thus atomizing the particles of butter fat in the milk. By this process it is claimed that milk so prepared

farm before prospective buyers in order to classes for children has been greatly to diminish the number of youthful law-break-process it is claimed that milk so prepared

If the farm is rented it will pay to haves

The recent report on "Juvenile Lawprocess it is claimed that milk so prepared can be successfully and profitably shipped from Italy to the English markets.

been from 41 cents a day. The Central American farm hand now gets about as much in a year as a good hired man in the United States gets in a month. A dollar must have something to it besides the name.

In the wheat region of Nebraska and Kensas quite a land boom is under way, owing to the large and profitable crops of the past four or five years. This is a region subject to droughts, which have brought widespread ruin to farmers in other years. Some of the farm owners, fearing a return of a series of bad years in the future, are prudently selling out at top of the boom and retiring to the towns. It is said that some Eastern farmers are taking up land in that region; certainly at considerable risk. as values would go down fast after one or

The legislative campaign against the gypsy moth begins early this year. Two bills have already been offered the Massachu-setts House of Representatives. Both bills provide for the compulsory destruction of the pest by the private owners, the expense two alleged husbands cheerfully tending above a certain limit to be assumed by the State. This looks like a very unsystematic plan. The pest is a State, even a national problem, and should be taken in hand in a thorough-going wholesale manner If the work had been continued as it started the moth would have been subdued long

> The Grange seems to be doing good work in getting the insurance rates reduced on farm property. Formerly the companies took almost any risk offered and to whatever amount the owners chose to ask. Now the tendency is to inspect properties carefully before insuring and to permit insurance only to a less amount than the full value of the buildings. Farm insurance has formerly proved very unprofitable to the companies as well as costly to the owners. But now that the Grange has shown how, by taking only selected risks, it is possible to avoid many losses and to insure at low cost, the old-time companies are showing a disposition to adopt similar methods. The Massachusetts Grange insures its members for say \$1500 at a rate of \$5 a year, and finds itself able to pay back a small dividend to those who renew. This is about one-half the rates which some of the regular insurance companies exacted a few years ago, together with some very troublesome rules, fines and restrictions. There was apparently an attempt to establish a kind of insurance trust or monopoly, and the cooperative efforts of the Grange and various small mutual societies have tended in a measure to prevent such a result.

## Disposing of the Farm.

The time arrives at last when the elderly farmer and his wife can no longer carry on the farm at a profit and help becomes more and more unsatisfactory. The cares of business grow heavier and there are times of illness now and then during which the farm progress is mostly in the wrong direction. Memory fails occasionally, and the limbs give out quickly under stress of hard work. The aging couple realize that the farm is running behind in condition and fertility.

About this time occurs the question the residence of a lifetime, perhaps, and the only place which will ever seem absolutely a home. Every room has its memories, every acre shows proof of good work done. Fortunately the aftermath of the terrible like transplanting the grand old shade trees one who loved his fellow-men." For the owners to move would seem almost it is a constant pain to the thrifty couple to see so much needed work that must be slighted or done at a loss. Town life also seems attractive, now that there is enforced leisure for social affairs, while the daily trip from the farm seems much more of an undertaking than in former years.

> In some cases the problem is not so hard to solve. Perhaps there is a married son who will take the farm and pay rent enough to help support the old couple in town, or possibly the two families can conveniently live together on the farm. In other instances the town has grown toward the farm year by year, bringing the street railroad and other facilities, and perhaps affording a profitable demand for the farm for building lots. A farm which has thus in creased in value becomes a fine staff for old age, the occasional sales of land both reducing the cares and increasing the income of the owners, besides giving them new neighbors. Nobody can get more solid comfort out of a small income than could a healthy, frugal, retired farmer. Sometimes it is possible to lease a part of the farm to a neighbor, and thus reduce the cares to the scope of capacity and desires of the is far more satisfactory than to leave the old home.

But if the final decision is to leave or sell the farm and move elsewhere, there is still they could stay always. "But it's your much to be considered. The advantage of a dinner time," the teacher remonstrated, lease is that there is still a chance to go back if desired, or to give over the old homestead to a member of the family. It often happens that the retired farmer regrets the change, and would go back if he could. If the farm is rented and the town home taken on similar terms, the family can be free to move back if they choose. If the farm tenant is a good one, the owner may take an interest in the operations and look on with pleasure at seeing the work

proceed as it should from season to season. On the other hand, a good tenant is a very scarce article. At least nine out of ter farms will run down during the lease and be much less salable at close of the term. No lease that a responsible tenant will sign can prevent damage that would not ocour under the eye of a thrifty owner. There will be bushes in the pastures, gulties in the fields, weeds in the mowings, gaps in the walls and fences, broken window-glass, outbuildings burned, neglected fruit and shade trees, washouts in the farm roadways, waste in the woodlot, and a generally unthrifty look about the premises. 'If the tenant is unusually shiftless or the lease poorly drawn, there may be serious loss, amount ing sometimes to almost the whole amount received. Rent does not usually more than pay six per cent. on the selling value of the farm, with taxes, insurance and perhaps a

lawyer attend to the lease, and one who has TELEPHONE NO. 3767 MAIN.

It is not so much the amount of pay received, but rather what can be done with hear that Prince Cupid has been guilty of disorderly conduct?

Did anybody notice the wave of juvenile grief over the no school signal in some of our adjacent cities?

Such items as the kind of farming to be followed, amount of stock, sale of hay, wood in manure during and at end of lease, remainished in proportion to the population of the city, an improvement attributed "to the manifold efforts to direct youthful energy within law-abiding channels." The bad ton to the arrangements oommon to any kind of a lease. Such agreements are uncertain and incomplete at the best, and not much should be left to verbal understand-been from 41 central been from 42 central and incomplete at the best, and not much should be left to verbal understand-been from 43 central ingo or to great the city, an improvement attributed "to the manifold efforts to direct youthful energy within law-abiding channels." The bad ton to the arrangements are uncertain and incomplete at the best, and not much should be left to verbal understand-been from 44 central and incomplete at the number of juveniles taken in charge by the authorities has decidedly diminished in proportion to the population of the city, an improvement attributed "to the manifold efforts to direct youthful energy within law-abiding channels." The bad ton to the arrangements are uncertain and incomplete at the best, and not manifold efforts to direct youthful energy within law-abiding channels." The bad ton to the arrangements are uncertain and incomplete at the best, and not manifold in proportion to the other, and the city, an improvement attributed "to the manifold efforts to direct, and the city, an improvement attributed to the city, an impr had special experience in such matters. Such items as the kind of farming to be fol-lowed, amount of stock, sale of hay, wood

ngs or to guess work.

Still another encouraging aspect of RoxWhen the owner is sure of his course, it bury House activity is the large number when the owner is sure of his course, it is better to sell than to lease, and the sale should be made before leaving the farm. An owner is his own best local agent and caretaker. A little judicious advertising and a hustling real estate broker will help.

Farm papers of large local circulation are the best advertising mediums for farm property. Sales are usually made to some person not very far distant. Few people will travel long distances to look at a farm is not likely. For this reason it is not usually profitable to send money to distant agents. Better rely on those in the nearest large city, selecting one who makes a specialty of farms and who will examine the nore in six weeks toward making a sale than some others will in six years. The agreement with the agent should be in writing and should mention all the points in case of sale or no sale, including payment and limit of advertising. There are some agents who will try to impose upon clients in the absence of a complete agreement. The best agreement is, of course, "no sale, no money, on any pretext." Not everything should be left to the

agents. The owner should have some good photographs of the buildings and fields, copies of which may be furnished the agen or sent to correspondents. A very complete description should be written out and a number of neat copies made for sending out with answers to inquiries. The farm itself should be made to put its best foot forward and the stock and mowings should be well kept up. Intending buyers should be cordially welcomed, offered refreshments, and conveyed to and from the station in a good eam over the best road available, showing at the same time some of the most attractive parts of the town. The bargain should be made with the least possible delay. A farm seeker who leaves without making up his mind is likely to be long in doing so. If both man and wife are present the decision may be secured at once. Sometimes a little bonus of hay, stock or machinery will settle the matter. A cash payment of enough to bind the bargain should be insisted on at once, after which the sale may be considered reasonably certain.

Roxbury House and the Social Leaven. Of settlements, college, university and church, Boston has, of course, a very commendable quota. But no one of these far more imposing in its plant and far more ambitious in its plans, though it may be, does better work, we are sure, than Roxbury House. Some seven years ago this undertaking for social service in the vicinity of Mall and Eustis street began its life. The first "settlers" were a young college man and his wife, and their idea in "set tling" was simply to make their house a centre of neighborhood hospitality. There were several settlement houses in Boston even in those days, but the family idea as applied to them was new,-as was also the name these young people proceeded to put on the door-plate of the big, old-fashioned house which, surrounded as it was by an ample garden, seemed to supply them with the ideal spot for the unselfish home of whether or not to stay on the farm. It is their dreams. "Without a vision," wrote wise, old Solomon, "the people perish."
The "vision" of the Ashtons was helpful friendliness. They named their house, therefore, after that Abou Ben Ahdem whom Leigh Hunt has immortalized "as

the friends who came to take the work when they were forced to give it up, likewise loved their fellow-men. The clubs and classes which grew from this love naturally demanded-eventually-larger quar ters than the rambling old house supply, and in due time an adjacent brick building was taken in and fitted to settlement uses. A little later still, the Roxburghe Club, made up of the influential and energetic ladies of Roxbury, took this house in hand, enlisted in its support the minsters and school-masters of Roxbury, and the little germ born from a love of human ed out into the thriving young ity blossom

ettlement of today. The house is now especially fortunate in its head president. Sarah Perry Browning is not only in love with her work, but she has that very happy gift, the power to interest others in settlement problems. We do not remember ever to have seen a more nteresting report than that of Roxbury House for 1902-1903, which she has just is sued over her own name. The spirit, as well as the actual result of settlement aspiration, is here. One story that she tells well illustrates this: Three children at Roxbury House, one stormy morning in February, were lingering after the dismissal of a class that had lasted an hour and a half. Soon they announced that they wished and I myself am hungry, aren't you? "Yes, but we want to stay." "Why do you want to stay?" again questioned the teacher. "Oh, I don't know," was the only answer they could give. They were not able, of course, to analyze the force that drew them so powerfully to the settlement, but they felt at home. The Council of Roxbury House, as well as its club workers, do mor than impart knowledge, they reflect kindli ness, sympathy, friendship and good cheer.

Roxbury House has, indeed, been from the very first a home. It has endeavored always to give its people some of the advantages that those in more luxurious circumstances enjoy in their homes. Hence there are games and amusements to keep children off the street, educational and in-dustrial classes for the studious and ambitious, and even entertainments and parties where the neighbors meet for social enjoy ment as they cannot in their own cramped quarters. Of course more emphasis has all the way through been laid on agencies to pursue a penny wise and pound reach the children than any other branch. The hope of the world lies in the children pense. There is nothing held so cheaply and Marshall, the statistician, has said that as human existence, and the efforts fifty per cent. of the best natural genius of to prevent the loss of life do not keep pace the world is among the children of the working classes,—the very last place on earth, of course, where parents have in the They cannot be bought and sold, and, there-

minish the number of youthful law-break-ers. The recent report on "Juvenile Law-Breakers in Boston" joyfully registers the fact that the number of juveniles taken in

April the Shakspere class, composed of girls aged thirteen and fourteen, after presenting "The Taming of the Shrew" so successfully as to be able to provide a stage upon which other House Dramatics are now given, repeated the entertainment at the Colonial Club in Dorchester, for the benefit for sale, and without a personal visit a sale of no less an institution than Smith College. "Perhaps," observes Miss Browning, "these youthful performers may never enjoy a college training; but they will have the satisfaction of having helped the largest women's college in the world in its hard task property in person and bring cuatomers of raising a hundred thousand dollars in directly to the farm. Such a man will do order to secure another hundred thousand from Rockefeller." A millinery class gave a minstrel show which not only netted the twenty-five dollars necessary for a year's telephone subscription, but also helped to buy settees "so that Roxbury House was

able to cease borrowing chairs of the neigh-

boring undertaker." The excursions which

give pleasure to the children at this house

are often rather amusing. A dentistry party, we read, means a trip to the Tufts

Dental College, which school has generously

offered to look after the teeth of such Rox-

bury House children as are accompanied by

an older person. In the autumn there were

five of these parties, all of which were as eagerly anticipated as pionics in the park. Yet the duty of any settlement is not limited to the lowly. Its chief work is to break down the walls of partition between men by furnishing a common meeting-place. In the earlier years of our country and in smaller communities, the church did this, as Mr. Robert A. Woods has pointed out. are too many churches, and the people to whom they appeal are too seldon from varied classes of society. The settlement becomes, then, a unique opportunity to increase the knowledge of each other, which men of many minds and divers social status greatly need to have. With twelve hundred dollars,-the sum received by Roxbury House last year from the outside publicsimilarly invested in one hundred other places on the outskirts of the city, and with all these working centres for the distribution of social leaven, carefully connected and pledged to conscientious co-operation, we should have in a few years no such thing as a slum in Boston.

## Protection for Life.

In view of the terrible disaster in the Iroquois Theatre in Chicago, it may be pertinently asked, why should not all stage enery be made of incombustible material, and why should wood be used at all in the construction of a playhouse? The architect of the recently destroyed place of amusement says that he will never again draw plans for a theatre that is to have a stick of wood in its construction, and this is a wise conclusion, though it is a little like shutting the stable door after a horse has been stolen. The Iroquois was said to be entirely fire-

proof, but the absurdity of the claim has been proven in this case after a similar fashion in other instances in which like claims were made. Indeed, the designation "fire-proof," in regard to large edifices, has too often turned out to be a delusion and a snare, though there are, no doubt, some buildings that are reasonably

ented the loss of a great deal of life by shutting the stage off from the auditorium but, unfortunately, it could not be success fully handled, and, checked in its descent became an added source of danger by caus ing a draft that helped to spread the flames, nstead of checking them. But why was not this device in a condition to serve the purpose for which it was introduced. It is said that it was not heavy enough to drop successfully, and, therefore, stuck in its grooves, and thus helped to make a death trap for nearly six hundred people. was to blame for putting up an imperfect shield? That is a question that should be answered, for too often the precautions taken against fire in public structures are no precautions at all. They are only springes to catch woodcock, as my! Lord Polonius might say, and deceive while they to some extent quiet fear. The present writer was in a playhouse some years since, and the business manager, now dead, who was showing him over the house was dilating on the care that was taken in every direction to quench a fire should it break suddenly. There were lines of hose plentifully disposed in convenient places, he said, and he proceeded to illustrate by stepping into the orchestra where, under the conductor's desk, was a coil of hose which he pointed to with some pride. "This," he said, as he took in his hand a brass nozzle would be of great assistance rather ludicrously, the article he had in his hand immediately dissolved its connection with the leather pipe, on account of its rottenness. This "precaution" had probably never been examined since it was put in place, and was more ornamental than useful. This is only an example of the way in which utensils intended to be used in case of fire are neglected until they are entirely worthless

But our buildings might be safer if there was an adequate and sensible building law. nch as the Springfield Republican suggests, which would be rigidly enforced. Our eseemed contemporary says: "The Massachusetts Legislature is soon to assemble. It might well set a committee promptly at work studying the great problems of the ction of buildings and what can be reasonably and immediately done in the way of a general law, the enforcement se provisions shall rest with the State police department." The State could compel many improvements, which are now not considered by builders, who often

A CUCUMBER hie is a superb variety of ad size. It pays to buy fro W. W. RAWSON & CO., Seedsmen and Market Gardeners
12 and 13 Paneuii Hall Square, Roston, Mass.

etimes in a burning building people destroy themselves through fear, and, in their eagerness to reach a place of safety, trample upon one another in a frantic way that utterly defeats the purpose that they have in view. If they could be controlled in their mad haste, they might, many times for forty years. Of course a young would be cultivated for a time, but

This, however, does not excuse the neglect to provide adequate exits for a pushing for the sake of convenience. In and struggling crowd in an auditorium. In the Iroquois Theatre the provisions for reaching outdoors from the lower floor seemed to have been ample, but in the upper part of the house the proper means for reaching the street level appeared to be has been made available to bring lacking. The lessons that the recent fire the farm what has been taken as conveys will not be lost, but human nature is weak, and in a few years there may be a drifting back to the old state of carelessness and to the trusting-to-luck idea which too generally prevails everywhere. In the passage and enforcement of a proper building law safety lies. Let Massachusetts lead off in this direction and the other States will follow.

## Psychological Advertising.

That advertising rules the world we have come latterly firmly to believe. But that it might rule the world much more wisely and effectively than it does, one is speedily persuaded after reading the entertaining article,—the first of a series of studies of "Modern Advertising,"—written for the as the Grange movement is doing all January Atlantic by Walter D. Scott, assistant professor of psychology in Northwestern University.
The first advertisement printed in English

appeared in the Imperial Intelligencer in March, 1648, we are told. Yet it was not until 1864 that Harper's Magazine printed advertisements, and not until 1887 that advertising in America got out of its swaddling clothes. Leading advertisers say, indeed, that in comparison with today no advertising worthy of the name was in existence even so late as fifteen years ago. Professor Scott adduces figures to prove this true. In October,-regarded as a typical month,-Harper's Magazine had in 1864 three and one-fourth pages. In 1887 it had thirtyseven pages. From 1887 on, its pages have ncreased almost steadily each year until ast October it carried one hundred and forty-one pages of advertisement.

The same thing is true of almost all our ublications, and the number of these publications is fairly appalling. There are twenty thousand periodicals, we learn, carrying advertisements, each with a constantly increasing number of pages devoted to business, and with a rapidly advancing rate secured for each advertisement. Naturally, therefore, the expense of putting a very new commodity or product before the eyes and thence into the hands of the public is simply enormous. Mr. Post is said to spend as much as \$600,000 annually in advertising his food-products. One million dollars was spent last year in advertising Force, and over one million dollars in advertising Peruna. With these imposing sums being spent all the time by wealthy corporations eager to push their wares, it is, of course, a great and pressing problem how the man of limited means, having a really good thing to offer the public, shall secure a market for it.

Here, then, is where psychological advertising comes in. Space is lacking here in which to even summarize the suggestions offered by Professor Scott. His whole paper should be read carefully for the sake of the cogent reasons he there gives in favor of carefully planned advertisements. free from danger by fire.

Our readers may get a hint of his thesis,
however, from the word, "connote." This the Iroquois Theatre, would probably have word, a favorite with Prof. Barrett Wendell of Harvard, might be defined as the effort to approximate in words the object or the effect desired. If, for instance, one says The car came clanging down the street. the sentence used described exceedingly well the fashion in which the car proceeded.

Now this same principle, we are told, needs to be applied to advertisement writing. The man who wrote the advertisement describing a certain kind of wafer as "A Fairy Sandwich with an Upper and Lower Crust of Indescribable Delicacy, Separated with a Creamy Flavor of Lemon, Orange, Chocolate," and so forth, understood this perfectly. Just to read of this wafer makes one anxious to buy it. The advertisemen has, in a word, been psychologically planned to appeal to the taste. "Some advertisers of food," comments Professor Scott, "are evidently chronic dyspeptics, and take it for granted that all others are in the same condition. They have nothing to say about their food except that they have wonderfully medicinal properties. To me a food which is healthful savors of hospitals and sick rooms, and is something which a well man ould not want." The very remarkable article from which we have quoted quite convinces us that the successful advertiser of the future must, indeed, be a skillful psychologist.

## Goats as Farm Stock.

The boom in Angora goats is being worked full value by those who have the stock for sale, and there may be some danger of a "craze" such as took place in connection with Beigian hares a few years ago. The Angoras have their place but it probably will not be a permanen one in Eastern farming. They will help clear brush land, to be sure, but so will s bush axe and a good burn-over.

The stock is costly and a good many goats are needed to kill off the brushes from a large piece. They are less hardy than common goats, but equally mischievous and will spoil young apple trees just as quickly as other sapplings if they get a chance Fences that will hold them securely are rather costly as compared with the walls or rails of the average cow pasture. They require considerable food and shelter in winter. The care needed differs somewhat from that given other farm stock and must be learned through several years experience. The preparation and marketing of the fleece, carcass or breeding stock would not be very convenient for inexperienced persons under prevailing conditions. There are farms and locations where the Angoras will fit the situation perfectly, but the aver age farmer is advised to go slow.

## Among the Farmers

In reading of the Puget Sound district of uct does not seem to be displaced to any great extent. The latest patent is one by which the milk is sterilized by heating and the cream prevented from rising by foreing the milk through a very small opening by the north Pacific coast, I became impressed

most prosperous poultrymen in the country being located there. I think the year who is determined to go West, mi well near one of the Puget Sound anywhere.-G. B. Fiske, Middlese:

do as

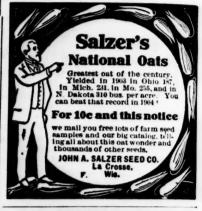
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the trees reach maturity. I prefer chard land, they should not be near forty feet. Air and sunshine are portant as spraying.-H. S. Lowell, Mass.

The cow has been a home built system of cropping. Cattle feeding saving force in agriculture. The of dairy cows restores the fertilit farm and allows the farmer to keep large crops which a fertile soil, one condition by the use of animal man sure to yield.—G. M. Gowell, Orono. The Durhams are good. I believelass of stock can be developed the give us better returns than the Steers are good and profitable. W also raise large crops, and to do this increase our acreage. - J. E. Walling

Piscataquis County, Me. Allen District Pomona meets with andlow (Vt.) Grange Jan. 5. Both the subordinate and pomona are gaining steadily on, let farmers come in front and assert their rights by casting their ballots for the best men in their ranks, without regard to party lines .- S. S. Mayo, Ludlow, Vt.









## **Grape Vines**

**Most Extensive Crower of** 

Small Fruits . . . . Catalogue Free. CEO. S. JOSSELYN, Fredonia, N. Y.



## and mode of construction, are very different. P. Fence is the only woven fence made of B.-High-Carbon wire stock. That is better. PAGE WOVEN WIRE FENCE CO., Adrian, Michiga

PILES All varieties of Piles-internal itching bleeding, external, etc.

positively cured without loss time, loss of blood or pain. knife, no anæsthetic. Cured to Stay Cured

We guarantee success, or money funded. Price for complete treatmen \$1.50, sent anywhere by mail up receipt of price. Address JAMES M. SOLOMON, M.D., 2a Beacon S

Boston, Mass

LOOMIS MACHINE CO., TIFFIN, OHIO.

## M catalogue te for a copy

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The Markets.

BOSTON LIVE STOCK MARKETS.

ARRIVALS OF LIVE STOCK AT WATERTOWN AND BRIGHTON.

For the week ending Jan. 13, 1904.

Shotes Cattle Sheep Suckers Hogs Veals

Frices on Northern Cattle. Prices on Northern Cattle.

Per nundred pounds on total weight of allow and meat, extra, \$6.90\(\frac{9}{6}.75\); first \$5.50\(\frac{3}{6}.76\); second quality, \$4.50\(\frac{9}{6}.25\); afour choice single pairs, 50, some of the poorest buils, etc., 50. Western steers, \$3.80\(\frac{9}{6}.05\). Store Farrow cows, \$15\(\frac{9}{6}.25\); fancy milch cows, alleh cows, \$30\(\frac{9}{4}\)\$; rolds, \$15\(\frac{9}{6}.05\); three-year-olds, \$20\(\frac{9}{6}.05\). Per pound, live weight, \$\frac{1}{2}\)\$30; extra, sheep and ismbs per cwt. In lots, \$2.50 ambs, \$4.30\(\frac{9}{6}.60\).

togs—Per pound, Western, 4½@5½c, live shotes, wholesale—; retail, \$2.50@

Brighton-61@7c P to; country lots, 6@ SKINS-13e P lb; dairy skins, 40@60c.

PETTS-40@60c.				
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J S Henry 5 A Davis
J A Hathaway 975 1918 Massachusetts.
At Watertown.
J S Henry 19
O H Forbush 14

Canada. At Watertown. W Laveck 60 Expert Traffic.

No improvement in market for State cattle within the week at Liverpool or other English ports. Latest sales ruled at 11@12c, d. w., being ports. Latest sales ruled at 11@12c, d. w., being the same as a week ago. Sheep selling better by 1c p ib, with sales at 11½@13c, d. w., against 14½@16jc a year ago. Shipments of the week from this port were 2770 cattle, 2929 sheep and 10 horses. Shipments and destinations: On steamer Cestrian, for Liverpool, 412 cattle, 1011 sheep by Swift & Co.; 286 cattle by Morris Beef Company. On steamer Cambrian, for London, 296 cattle by Morris Beef Company; 248 do. by Swift & Co.; 50 do. by J. A. Hathaway. On steamer Sylvania, for Liverpool, 504 cattle, 754 sheep by J. A. Hathaway; 199 cattle by Morris Beef Company. On steamer Sarmatian, for Glasgow, 250 cattle by W. Daniels. On steamer Bostonian, for Manchester, 285 cattle, 1164 sheep by J. A. Hathaway; 180 285 cattle, 1164 sheep by J. A. Hathaway; 180 cattle by Brown, Snell & Co.; 60 Canada cattle by W. Laveck; 10 horses were by E. Snow on

Horse Business.

Demand was not extensive and hardly up to the average. There were more acclimated horses the average. I here were more accumated noises than Western selling, and an unusually large number this winter have been put upon the market, at a range of \$50@150 for the general run. Arrivals of Western stock were light. At Myer Abrams & Co.'s sale stable were 2 freignt cars of Western of light weight, chiefly 1100@1400 hs, at \$125@175; just a fair trade. At H. S. Harris Sons' sale stable, 2 carloads were on sale, of 1200@1700 lbs; a light trade at \$100@250. At Moses Colman Sons' sale stable were sold 50 head, the highest price \$125, down to \$50; trade light. At Welch & Hall Company's sale stable was a light run of Western; nearly 100 head of seconds. of 1050@1300 lbs. Sales from \$150, down to \$40. At L. H. Brockway's sale stable, sales ranged at \$150@300, for 1100@1700-lb horses.

Union Yards, Watertown. Tuesday—The trade in beef cows and helf-ers held about as last week; certainly no im-provement. Western steers cost 10c P 100 lbs, higher than last week and the lower grades lc better. Bologna stock was a grain slow. J. A Hathaway for home trade sold 40 steers of 160 ths. at 5½c; 40 do., 1550 hbs, at 5½c; 20 do., of 1450 hbs, at 5½c, with sales at 4½c. A. Davis had in 40 Western cows and heifers, of 1200 hbs, all good

Milch Cows. Dealers were not handling as many this week, but had cows left over from last week; a slim de-

mand and prices weak. Fat Hogs. Market on Western is off tc, l. w., on account

of heavy arrivals in Chicago of 65,000 last Monday; cost 43 @54c. Local hogs, 6@64c, d. w. Sheep Houses.

A fair run, including near 3000 exports. T Western cost higher for desirable flocks. I higher; cost here \$2.30@4.80, and lambs \$4.30 \$4 ixed, of 80 lbs, at 41c.

Veal Calves. No change, with a good demand. Prices generally sustained, with fair arrivals. Sales by W. Wallace, 40 calves, of 130 lbs, at 6c. J. S. Henrich and J. S. He

Live Poultry.

Light arrivals, only 35,000 fbs. Prices strong 125e for fowl; 11@12e for chicks; 8j@9e f Droves of Venl Culves.

Maine—The Libby Company, 50; W. A. Gle h, 20; Thompson & Hanson, 56; H. M. Low M. D. Holt, 15; Farmington Live Stock Cou ew Hampshire—W. Gordon, 8; A. F. Jones 60; S. R. Breck, 25; F. Wood, 23; W. ermont-N. H. Woodward, 12; R. E. Frence

6: W. Hall, 2; Dorand Brothers, 8; B. H. dbs, 40; W. A.!Ricker, 162; B. F. Ricker, 65; Atwood, 40; J. S. Henry, 30.

Lassachusetts—J. S. Henry, 76; O. H. For h. 6; W. A. Bardwell, 24; R. Connors, 13; H. A. aore, 37; scattering, 125; L. Stetson, 5; A. M. et al. 12. D. A. Walkar, 2: A. Wheeler, 9.

, 13; D. A. Walker, 2; A. Wheeler, 9. Strighton, Tuesday and Wednesday.

ighten, Tuesday and Wednesday,

ck at yards: 1788 cattle, 1797 sheep, 23,372

560 calves, 120 horses. From West, 1349

White, P To the property of the propert Blue Grass. P bu Timothy, prime. 3 about steady, although they are 1c higher West. Timothy, prime. 4 Timothy, prime. 4 Timothy, choice, Buckwheat ...... Blue Grass. P bu Timothy, prime. 4 Timothy, prime. 4 Timothy, choice, Buckwheat ...... Blue Grass. P bu Timothy, prime. 4 Timothy, prime. 4 Timothy, choice, Buckwheat ...... Blue Grass. P bu Timothy, prime. 4 Timothy, p

at 3e; 3 cows, 300 lbs, at 2e. D. A. Walker sold 6 cattle, of 5630 lbs, at 14c; 6, of 4710 lbs, at 24c. The Libby Company had in 3 nice Herefords, fed and raised by Herbert Black of Searsport, Me., nicely fattened, of 1300 lbs; also 2 oxen, of 3500 lbs, fed by E. H. Nickerson of Swansville, Me., all nice cattle.

The market seems overstocked. Milk is too plenty in this vicinity for a good healthy trade in cows. It was a slim trade last Wednesday, and slow trade today. Supply was limited and values weak. There were sales by the Libby Company of 3 choice cows at \$55@38; 4 cows at \$50; 3 at \$45; 3 at \$35. J. S. Henry sold cows from \$35@60. Veal Calves.

From 500 to 600 head on the market, taken readily at steady prices. The Libby Company sold at 6½.6½c. R. Conners sold 30 odd at 6½c. Choice calves, selected, command 7c. Late Arrivale.

Mednesday — Dealers say that butchers are acting mean this week in buying of beef cows, heliers and steers, only buying in a light way for immediate requirement, but arrivals today are light, which helps the disposal. Milich cow trade is stagnant and but few buyers. The reason given for light trade is that milk is very pientiful, therefore the neglect in buying cows. W. F. Wallace had 1 milch helfer from N. C. Carter of West Swanzey, N. H.; was nice, but trade being slow had to be sold at \$45. General sales at \$256,00. G. N. Smith sold 1 springer at \$45.50 cows at \$42.50. O. H. Forbush, 1 bull, of 1310 fbs, at \$3.30; 2 cows, 1790 fbs, at \$2.60; 1 cow, 820 fbs, at \$2.20; 1 cow, 820 fbs, at \$2.00; 1 cow, 820 fbs, at \$3.30; 2 cows, 1790 fbs, at \$2.60; 1 cow, 820 fbs, at \$3.30; 2 cows, 1790 fbs, at \$2.60; 1 cow, 820 fbs, at \$3.00, 57.50. J. S. Henry moderate sales at \$30,655.

sales at \$30@55. Store Pige.

BOSTON PRODUCE MARKET.

1	
-	Wholesale Prices.
	Poultry, Fresh Killed.
	Northern and Eastern-
- 1	Chickens, targe choice, P tb
	Broilers, 3 to 4 fbs, to pair, P fb 18(20)
- 1	Ducks
	Fowls 12414
	Cassa 10219
_	Geese
3	rigions, tame, choice, or doz
	" com to good, \$\P\$ doz
	Western dry packed
	Western dry packed—
	Turkeys, choice
	Turkeys, old
	Turkeys, No.2
	Chickens character lenge 12014
	Chickens, choice, large
	" mixed sizes 11@12 Fowls, fair to choice 104@13
0	Fowls, fair to choice
	Old cocks 9a
	Ducks, spring
	Geese 10@11
	Capons, large 18@19
	" medium 16@17
	" small
•	Receipts Jan. 12, were 711 packages. Receipts
-	for the week have been 9279 packages, com
	pared with 6035 packages for the same period
	pared with 6050 packages for the same period
	last year.
	Live Poultry.
	Fowls, P tb

Fowis, P ID 11@12
Roosters & th
Roosters, P b 7,2 Chickens, P b 10,211
Chickens, & ib
Butter.
NOTE-Assorted sizes quoted below include 20,
30, 50 fb. tubs only.
Creamery, extra—
Vt. & N. H. assorted sizes 24@
Northern N. Y., assorted sizes 23 a 23
Northern N. Y., large tubs 23 @
Western, large ash tubs 23@
Western, asst. spruce tubs234@24
Creamery, northern firsts 21 a 211
Creamery, western firsts 21@21
Creamery, seconds
Creamery, eastern 18@22
Dairy N V and Vt firsts 18@19
Dairy, N. Y. and Vt. firsts
Renovated 14@18
Boxes—
Extra northern creamery24@
Extra dairy
Common to good
Trunk butter in } or }-ib prints
Extra northern creamery 24@244
Firsts northern areamery 901.

٠.	
	Cheese.
	New York twins, extra, & tb 12@
	New York twins, firsts, P lb 11@1
	New York twins, seconds, P fb 9@
	Vermont twins, extra11
١	Vermont twins, firsts10 @1
ı	Vermont twins, seconds 9@
1	Wisconsin twins, extra, P fb113@
ı	Wisconsin twins, firsts, # tb 11@
ı	Sage
	Rggs.
ı	Nearby and Cape fancy, P doz 36@3
١	Eastern choice fresh
١	Eastern firsts 31@
1	Me., Vt. and N. H. firsts 31@
1	Western firsts 30@
ı	Vt. and N. H., fair to good 23a2
١	York State firsts 31@
١	Western average 28 g
۰	Western near to fair

A tr terre are and remarks &	
York State firsts	. 31@
Western average	. 28 a
Western, poor to fair	23@25
Western dirties	18 @23
D. fel-protection	076.00
Refrigerator stock	. 21620
Petatees.	
Houlton Hebrons, & bu	707.73
Houlton Green Mountains, P bu	75.079
Moulton Green Mountains, & ou	100010
Native Rose and Hebrons, & bbl2	200
Vineland, sweet, double head, P bbl 3	0003 50
Green Vegetables.	
Beets, & bu1	15@1 25
Cabbage, native, & bbl2	00 @2 50
Carrots, & bbl1	50 2 00
Chicago policiona	50 (E) 1.0
Chicory, P doz1	30,4
Escarole, P doz1	oua
Romaine, P doz1	
Lettuce, P doz	80@
Celery, native, choice, & doz1	00,22 00
String beans, So., P crate1	00.24 00
During bound, con, F ormer	

	Carrots, & Dol.
-	Chicory, P doz 1 50,0
	Escarole, & doz 1 50@
-	Romaine, & doz 1 50@
,	Lettuce, P doz 80@
3	Celery, native, choice, & doz 1 00@2 00
	String beans, So., P crate 1 00.24 00
•	Spinach, P bu 1 75@
•	Tomatoes, hothouse, P tb 40@
)	Onions native & bu 60@1 00
1	Onions, choice, yellow, P bbl 50@3 00
	Paranina 49 bu
•	Native hothouse cress, P doz 65@75
	Cucumbers, hothouse, & doz 1 00@1 25
	Green peppers, P crate 2 75@3 00
	Egg plant, P crate 5 00@6 00
	Parsley, & bu3 00@
	Radishes, P doz 30@
	Squash, P bbl 1 50@2 00
1	Squash, Western, Hubbard, P ton40 00@50 00
	Turnips, # 50x 50@75
	Turnips, Nova Scotia, P bbl 75@1 00
1	Mushrooms, native, P b 50@75
•	Mint, P doz 75.0
	Leeks, P doz 50@75
1	Chives, P box
1	Brussels sprouts, P qt 15@25
1	Artichokes, P bu

	Chives, P box	1 00.0
	Bruceals enrante Wat	13(4.23)
The	A stichokog 10 hu	50(a)2 (B
Che	Ovster plant, & doz	75@1 00
eep	Pumpkins, & bbl1	50@
	Oyster plant. # doz	50 a
ad,	Fruit.	-
au,	August Worthorn Com	00@9 7
	Apples, Northern Spy	00001 0
	" Snow, P bbl2	00003 0
er-	" Baldwin, No. 1, P bbl1	50@3 00
	" Greening, No. 1, P bbl	25@3 0
F.	" Baldwin & Green'g, No. 2, P bbl. 1	25/01 7
ry.	Common sweet	0001 50
	"Common sweet	50/a/2 00
	Bad Variaties P bush how	75@1 25
	" Red Varieties, P bush. box " Green cook'g sorts, P bush. box.	50@1 00
at	" common, p bbl	25(0) 78
for	" Pound Sweet1	£0002 50
101	Apples, in bulk & bbl1	25@1 75
	Oranges—	-06
	Florida, P box1	50@3 00
ea-		
we.	Cape Cod, P bbl4	50@7 00
	Cape Cod, P box2	00@2 25
m-	(leaner	
	Concord, P pony basket	12@15
3 &	Catawba, P pony basket	10@14
F.	ADDRESS OF THE PERSON NAMED IN COLUMN TO PER	-
	Hides and Pelts.	
ch.	Steers and cows, all weights	<b>5@6</b>
	Hides, south, light green salted	74@8
H.	Hides, south, light green salted	134@14
65;	huff in wast	04(42)
or-	" over weights, each	SUGUZ ZU
	Deacon and dairy skins	dU@65
A.	Dried Apples.	
M.		408
	Evaporated, choice	6@7
	Evaporated, fair to prime	5@61
	Sun-dried, as to quality	3@4

hi 9	00003 00	
bl	50/23 00	ti
No 1 10 bbl 9	25@3 00	e
No. 1, 19 bbl	25/01 75	c
west 1	0001 56	
ived 10 hhl 1	50/2 00	8
lies 19 bush hov	75@1 25	ti
k'e sorts W hush, box	50@1 00	e
weet	25 a i 75	g
et1	CO@2 50	W
bbl1	25@1 75	w
1	50@3 00	
14	50@7 00	0
x2	00@2 25	p
	10015	6
y basket	12@15	-
y basket	10.014	e
ides and Pelts.		g
	***	ig
all weights	t@6	C
t green salted	74@8	fe
flint	134@14	
91	8000	80
bs each	90@1 60	
ghts, each1 skins	80 CZ 20	
skins	contino	
ried Apples.	17522	gı
e	6@7	81
o prime	5@61	N
uality	3@4	
	- B-	tr
Grass Seeds.		n
P 1b	12@124 13@134	T
b	13@134	of
14.	16018	ye
	14@15	-
e. 1) tb	12@14	31
e, P tb	00@2 50	tw
	0000 20 1	th
	00:49 00 1	th
	75@2 W	2
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1	80@2 00	
	40@1 00	(La)
) bu1	05 00 00	lo
	angr w	ap
Beans.		B
2	00@2 05	fe
1	85(0)1 95	to
		-

,	Pes, seconds
ï	Pea, foreign 1 85@1 96
۱	Mediums, choice hand-picked 196@2 00
	Mediums, screened
ı	Mediums, foreign 1 80@1 90
ı	1 ellow eyes, extra
	Yellow eyes, seconds
	Red Kidney 2 70@2 80
	May and Straw.
	Hay, No. 1, \$\rightarrow\$ ton 16 00@17 00 14 00@15 00 13 00@14 00 13 00@14 00
ı	" " 2 "
1	" " 3 "
	" fine choice
ı	" clover mixed # ton
ı	" clover, # ton
	" swale. 29 ton
ı	Straw, prime rve
1	Straw, oat, per ton 9 00@10 00
1	Straw, tangled rye11 00@12 00

FLOUR AND GRAIN Flour.—The market is firm but quiet. Spring patents, \$4 90,25 30. Spring, clear and straight, \$3 80,24 25. Winter patents, \$4 40,24 90. Winter, clear and straight, \$3 90,24 70. winer, clear and straight, 53 504 70.

Corn Meal.—\$1.0721.09 P bag, and \$2.402

2 65 P bbl; granulated, \$2.9023.25 P bbl.

Graham Flour.—Quoted at \$3.1624.00 P bbl.

Oas Meal.—Strong at \$4.7525.00 P bbl. for colled and \$5.2525.00 for cut and ground.

Bye Flour.—The market is firm at \$3.152

3 75 P bbl.

Corn.—Demand quiet. Steamer, yellow, 59c. No. 2, yellow, spot, 564@57c. No. 3, yellow, 56c. New, 554c. No. 3, yellow, 56c. New, 651c.

Onus.—Demand quiet, prices higher.
Clipped, fancy, spot, 43@50c.
No. 2 clipped, white, 46c.
No. 3 clipped, white, 46c.
Millfeed.—Tendency strong.
Winter wheat bran, sacks, \$21 50.
Winter wheat bran, sacks, \$21 00.
Spring wheat bran, sacks, \$21 00.
Spring wheat bran, sacks, \$21 00.
Cottonseed meal for shipment, \$26 75.
Linseed, \$24 75.
Barley.—Feed barley, 48@50c.

Bye.—65c \$2 bushel. Bye.-foc P bushel.

THE WOOL MARKET. Unwashed fleece, fine, Michigan. MILK POWDER .- T. S., Rockingham

County, N. H.: We know nothing about the concern, but the adver-isement you enclose is certainly of a misleading nature, since the high price it promises for milk turns out, on reading the circulars, to depend on taking stock in the company and depends also on the com-pany's success and payment of dividends. The style of the claims advanced is not such as to inspire confidence. The manufacture of milk flour or milk powder may be a promising industry, but the process is not a secret, being well known and practiced in Sweden, Germany Denmark, as well as in the United States Denmark, as well as in the United States. This process, though rap'd, is unfortunately expensive, and the special machinery required can only be obtained in Germany, where the substance was first prepared by the well-known chemist, Siebold. In Sweden desiccated milk has been put upon the market under the name o milk flour. The skimmed milk has been reduced to the form of powder by Dr. Ekenberg of Goth enburg, and the apparatus by which this result is brought about is known as an exsiccator. A a meeting of the academy of agriculture Dr. Ekenberg exhibited samples of the desiccated milk which elicited favorable opinions. The product possesses all the qualities of milk in a concentrated form, except that the moisture is absent, and it will not turn sour nor ferment. It is completely soluble in hot water and can readily be transported in cans or bags. The cost of production is stated to be about one cent cost of production is stated to be about one cent per gallon of milk treated, or approximately one cent per ounce for the milk flour, and the price of a large evaporating machine is about \$1200 According to the Scientific American, Dr. Joseph H. Campbell of Pennsylvania has likewise succeeded in giving us milk in the form of powder, and to this powdered milk the name of Natrium has been given. The method of prens Nutrium has been given. The method of preparation consists in driving off the water by means of blasts of dry sterilized air, the milk being kept of blasts of dry sterilized air, the milk being kept in motion at first merely by the force of the air currents, but when it becomes somewhat thickened it is transferred to revolving drums and exposed to blasts of the sterilized air until perfectly dry. It is afterwards ground to powder and packed for shipment. From the highly concentrated nature of this product it is evident that it will prove of value and the product of not so much as a food by itself, but rather as an addition to those foods in which protein is de-ficient. For naval and military forces it will be invaluable. Its extended use in many trades would appear to be only a matter of time, and for invalids and children it is already daily prescribed by physicians. The numerous uses to which this new product has been put are not surprising, when it is considered that a recent comof the powder is equal, in nourishing and sustaining properties, to 3½ pounds of the finest beef, or about ten to twelve pounds of fresh milk. The promoter of the concern you speak of is ap parently making false claims in regard to invenparently making false claims in regard to inven-tion of the process. There is nothing to prevent any creamery from buying an evaporator and making the milk flour from its surplus skimmlik, and the industry will quite likely be developed

in some such way.

APPLE BOOK.—H. B., Manchester, N. H.:
Prof. L. H. Bailey's book on fruit growing will
probably answer your, purpose as well as anything. (\$1.25). Macmilian Company, publishers, New York city.

FOUR VALUABLE CROPS.

The \$2,500,000,000 which the crops of corn, cotton, wheat and oats promise to yield, is sufficient to give each citizen in the United States about \$33.

WHERE EGGS ARE SCARCE INDEED. Poultrymen in South Africa should be doing very well at the prevailing prices for fresh eggs, which are quoted at eighty-live cents to \$1.82 per dozen, according to season. This scarcity of fresh eggs has led to a demand for condensed eggs which are made by partly drying the con-tents of eggs and adding sugar. In this form they run fifteen to the pound and are put up in air-

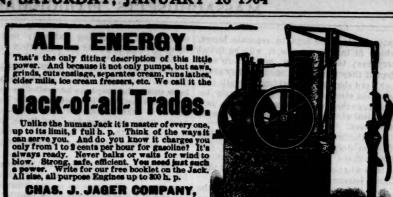
THE BEET AS A PORK MAKER. THE BEET AS A PORK MAKER.

Eight pounds of mangels or carrots and about the same weight or a little less of sugar beets equal in value one pound of grain. This is the consensus of opinion of the Ottawa, Copenhagen and several American stations. At Copenhagen the mangels were fed finely cut and raw, and even when one-quarter of the daily feed was given in the form of roots no injurious effects were noticed on the quality of the pork.

CHEAP NITROGEN. In speaking of clover crops, Prof. John Craig of New York placed the hairy vetch first. Vetch planted early in June caused an addition by the first of November of 266.1 pounds of nitrogen to every acre on which it was planted. Cow-peas gave 62.6 pounds. If the grower values nitrogen in the form of a commercial fertilizer at fifteen cents per pound, it is quite evident that he gets (ertilizing material at a very low price when he sows vetch to plow under.

GREAT POULTRY STATES. The value at that time was \$4,310,755. The value of the poultry raised in the State for an entire oear, 1899, was more than \$6,000,000. In the cen-us year, New York produced more than sixty-wo million dozen eggs, or considerably more han one hundred eggs for each inhabitant. In the value of its eggs, New York ranked fifth

PLENTY OF ROOM FOR APPLE TREES. Some orchardists in New York give their trees ots of room, and make money by doing so. One opple grower in that State has an orchard of aldwins in which the trees were planted 40x40 et apart. When full grown they were thinned sixty feet. On this orchard forty-eight thou-



The latest fashionable fad is the keeping a pet cat. They are not often allowed to roam with the same freedom as nature intended them to, therefore they cannot exercise their instinct in procuring grasses and tonics necessary to their health. A tonic is, therefore, necessary, and the Walmut Cat Food is the best for them. Keeps them healthy and active. They thrive on it. Increases their appetite, furnishes strength and vitality, and allows the hair to be of soft sliky nature. For invalid cats it is invaluable. For old cats, it gives them life and appetite. Comes in powdered form in bottles. Try it and make your cat a beautiful pet. Send 50 cents for a bottle, or \$5.00 per dozeb.

## SHORT-HORNS FOR SALE

AT PRIVATE TREATY.

On account of advanced age I will sell my entire herd of Short-horns, numbering about 100 head, nearly all females, of Bates, Fiat Creek Young Mary, Rosemary and other tribes, many of them with calves at foot and is good breeding condition. Have three herd sires of Scotch breeding and a number of other young bulls. I MEAN BUSINESS, and will sell in lots to suit purchaser at low prices.

ABRAHAM MANN,

ROSSVILLE, ILL. 06 miles south from Chicago on C. & E. I. Ry.

Dulwiet Hill, Sydney, N. S. W., Australia-dez New Canterbury Rend, Oct. 25, '03. Dr. B. J. Recoldil Co., "It had been me one development that have been the Dis-cessed." I have used your Rendall's Sprin-Cure, and I can safety say it is the best that I have ever had, and I recommend it to other Is Known the World Over being the oldest and only really reliable cure for Spavins, Ringbone, Splints, Curbs and all other forms of Lameness. It has met with the unqualified endorsement of orsemen every where, in all localities and under all conditions. It never fails, but cures alckly and permanently.

In addition to being the best stable remedy known, it is unequalled as a biniment for puschold and family use. Sold generally by all druggists. Price \$1; six bottles for \$5: is send valuable book, "A Trestise on the Herse," profusely illustrated, free upon request. DR. B. J. KENDALL CO.,

## OUR COFFEE

Enosburg Falls, Vermont

ORIENTAL MALE BERRY JAVA

Satisfies You!

Give us a chance on your TEA. We assure you fair prices and purity in TEA.

FORMOSA, OOLONG, ENGLISH BREAKFAST, SOUCHONG, JAPAN, **GUNPOWDER, HYSON,** 

35c., 40c TEA, COFFEE 50c., 60c COFFEE 75c., 90c

INDIA and CEYLON TEAS \$1.00, \$1.25 Sign of the Big T Kettle

Afternoon Tea, Flowery Pekoe, \$1.50.

## ORIENTAL TEA CO.,

Scollay Square, Opp. Subway Station, Boston, Mass.

sand gallons of bordeaux mixture were used, and the crop was sold for \$15,000. Out of ten thousand barrels gathered, not over one hun-

BEST CORN FOR THE NORTH.

In a test of 135 varieties of corn grown for fodder or silage at the Ontario experiment farm New Delaware Dent and Pedrick Perfecte New Delaware Dent and Pedrick Perfected Golden Beauty gave the greatest total yields, being twenty-four and 23.8 tons per acre, respectively. The greatest yields of husked ears were produced by Golden Leneway Dent, Snow White Dent and Black Mexican sweet corn, the yields being 4.3, 4.3 and 4.2 tons per acre, respectively. Salzer North Dakota, Compton Early and King Phillip, Flint varieties, and North Star Yellow Dent. a Dent variety, are recommended for ow Dent, a Dent variety, are recommended for central and southern Ontario. An average of four years tests from planting at different depths gave the following total yields: Two inches, 13.2 tons; 1½ and three inches each, 11.8 tons; no inch, 11.7 tons; one-half inch, 10.6 tons, and four nches, 9.8 tons.

It is gratifying to know that twenty-one charitable and philanthropic enterprises were the recipients on the first of January of \$1000 each from the trustees of the Robert B. Brigham estate. They included, among others, the Massachusetts Charitable Eye and Ear Infirmary, the Boston Provident Association, the Channing Home for Consumptive Women, four homes for aged men and women and the Home for Aged Couples, the Children's Hospital, the New England Home for Little Wanderers, Massachusetts Infant Asylum, New England Hospital for Women and Children, Perkins Institution and Massachusetts School for the Blind and the Massachusetts Society for the Prevention of Cruelty to Children. The trustees under the will, C. O. L. Dillaway, W. E. L. Dillaway and H. M. Burton, have issued a statement concerning the estate left by Mr. Brigham, in which they say that the balance of the income is accumulating for the establishment of the Brigham hospital, for The extent of the poultry interests is very great. Poultry and eggs contribute to nearly every meal in nearly every household in the land. New York State was seventh in the value of poultry on June 1, 1900, being exceeded by Iowa, Illinois, Missouri, Ohio, Pennsylvania and Kansas.

The relief that the resease of the relief to the relief the building of which land has been secured whose lives need to be brightened as much as possible. "During the past year," we are told, "a corporation, following out the provisions of the will, has been formed, under the laws of the State of Massachusetts, composed of the following well-known persons: John Shepard of the Shepard, Norwell Company; Francis H.

Allens Lung Balsam

Manning of Luce & Manning; Eugene N Foss, treasurer of the B. F. Sturtevant Company; Michael Anagnos, secretary and director of the Perkins Institute for the Blind; Andrew J. Bailey, corporation counsel of the city of Boston; Ubert K. Pettingill of Pettingill & Co., incorporated, and a former trustee of public institutions of Boston; Charles J. Lincoln, head of Boston; Charles J. Lincoln, head master of the Dorchester High School; Rev. Charles T. Whittemore, rector of All Saints' Church, Dorchester; Wallace L. Pierce, president of the School; B. lace L. Pierce, president of the S. S. Pierce Company; Elmer H. Capen, president of Tufts College; Elizabeth F. Brigham, the only sister of the testator. These parties are also directors of the corporation, and after the establishment of the hospital referred to, they and their successors take charge of its management and direction. The trustees under the will continue to pay the net income received under the will, over and above the annuities, for the maintenance and support of the hospital." The hospital when it is built will probably accommodate more than three hundred persons, for the income from the estate will be allowed to accumulate until such time as there is money enough to make the hospital a model one in all its appointments that will be free from encumbrance, thus leav-ing the entire income thereafter for the sup-port of the hospital. This practical charity, it is thought, will be the most magnificent and extensive one within the city limits.

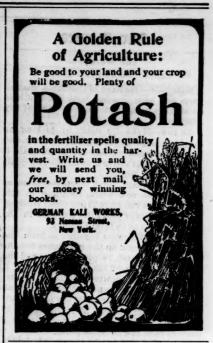
THE ANNUAL MEETING OF THE **New England Agricultural Society** WILL BE HELD AT WESLEYAN HALL, 36 Bromfield St., BOSTON,

TUESDAY, February 2, 1904. At 11 A.M. for the Election of officers and the transaction of other business that may properly come FRANCIS H. APPLETON, President LEANDER F. HERRICK, Secretary.

## ARTHUR JOHNSTON Greenwood, Ontario, Canada,

OFFERS Imported and Home-Bred

SCOTCH SHORT-HORNS OF BOTH SEXES.



PROBATE COURT.

to the heirs-at-law, next of kin and all other persons interested in the estate of CAROLINE B. MORTON, late of Newton, in said County,

persons interested in the estate of CAROLINE B. MORTON, late of Newton, in said County, deceased.

WHEREAS, a certain instrument purporting to be the last will and testament of said deceased has been presented to said Court, for Probate, by Myron L. Morton, who prays that letters testamentary may be issued to him, the executor therein named, without giving a surety on his official bond.

You are hereby cited to appear at a Probate Court, to be held at Cambridge, in said County of Middlesex, on the second day of February, A. D. 1904, at nine o'clock in the forenoon, to show cause, if any you have, why the same should not be granted.

And said petitioner is hereby directed to give public notice thereof, by publishing this citation once in each week, for three successive weeks, in the MASSACHUSETTS PLOUGHMAN, a newapaper published in Boston, the last publication to be one day, at least, before said Court, and by malling, postpald, or delivering a copy of this citation to all known persons interested in the estate seven days, at least, before said Court.

Witness, CHARLES J. MCINTIRE, Esquire, First Judge of said Court, this twe fith day of January, in the year one thousand nine hundred and four.

S. H. FOLSOM, Register.

Commonwealth of Massachusetts.

NORFOLK, SS. PROBATE COURT.

TRUBATE COURT.

To the next of kin and all other persons interested in the estate of ELIZABETH M. LYNCH of Weymouth, in said County, a minor.

WHEREAS, Bridget M. Lynch, the guardian of said minor, has presented her petition for license to sell at private sale, in accordance with the offer named in said petition, or upon such terms as may be adjudged best, certain real estate therein specified, of her said ward for her maintenance.

therein specified, of her said ward for her maintenance.
You are hereby cited to appear at a Probate Court, to be held at Dedham, in said County of Norfolk, on the third day of February, A. D. 1904, at ten o'clock in the forenoon, to show cause, if any you have, why the same should not be granted.

And said petitioner is ordered to serve this citation by delivering a copy thereof to each of you, fourteen days at least before said Court, or by publishing the same once in each week, for three successive weeks, in the Massachusert of the serve Floughman, a newspaper published in Boston, the last publication to be one day, at least, before said Court.

Winess, James H. Flint, Esquire, Judge of said Court, this eleventh day of January, in the year one thousand nine hundred and four.

JOHN D. COBB, Register.

NOTICE IS HERRHY GIVEN that the subscriber has been duly appointed administrator with the will annexed of the estate of CAROLINE A. SANBORN, late of Weld, Me., deceased, testate, and has taken upon himself that trust without giving bond, and appointing W. T. Sears of 132 Perkins street, Somerville, Massachusetts, his agent, as the law directs.

All persons having demands upon the estate of said deceased are required to exhibit the same, and all persons indebted to said estate are called upon to make payment to the subscriber.

CLIFTON P. SANBORN, Administrator.

Hooksett, N. H., January 6, 1904

FARMERS' WANTS

ONE CENT A WORD

WHITE WYANDOTTE COCKERELS for sale. G. C. FORRISTER, Framingham, Mass

REES-\$1 worth up at wholesale prices. Send to G. C. STONE'S, Wholesale Nurseries, Dansville, N.Y., for \$1-page catalog. Established 37 years. Secure varieties now, pay in spring.

ON'T buy Holstein bulls until you write D. H. GOODELL, Antrim, N. H., about yearlings from officially tested butter cows.

ARGE ENGLISH BERKSHIRES—Spring and fall pigs from carefully selected herd of imported and American stock of highest quality. B. G. BENNETT, Rochester, N. Y.

WANTED—Housekeeper, American, from 20 to 40; reference required (preference one who plays pinno some, for company.) House with modern in provements in city, two in family. Can attend church No big Sunday dinners, good home, good pay. Address C. A. HESELTINE, Agt. B. & M., Personal Lawrence, Mass.

WANTED—Good farmer in institution for boys Positively no liquor or tobacco. Wages \$30 per month. For particulars address BOX 168 Walpole

WANTED—Young married man, good milker, team ster, no liquor or tobacco, tenement, barn, gar den, fruit, permanent place good wages. A. N 870WE, Hudson, Mass.

WANTED-Single man on dairy farm, good milker steady job to good man. FRANK D. MERRELL West Hartford, Ct.

Nable-bodied girl for general housework, \$3. Give references. PROSPECT FARM, South Framing ham, Mass.

IDDLE-AGED man on farm, either married or single. Write "SAXON," Belchertown, Mass.

GOOD man wanted on farm. BOX 55, West Willing ton, Ct. THREE HUNDRED hotbed sashes for sale. Enquire of M. H. HUSSEY, North Berwick, Me.

OR SALE—Very fine individual and bred regis-tered Jersey bull calves, 6 to 12 months old, helfers and young cows. Also registered Ohlo Improved White Chester Pigs. T. G. BRUNSON, East Hard-wick, VI.

WANTED—A well recommended girl or middle-aged woman for general housework in a small private family. House has all conveniences. Salary 316 per month. Address BOX 102, East Northfield, Mass.

WANTED—Young man for all-round farm work Good milker, single, temperate, references State wages, with board in family. J. H. NELSON Lakeville, Mass.

WANTED—Man and wife, teamster and housework Family 8. \$35. EDGAR HEMINGWAY, Mon towese, Ct.

M. D. WHITNEY, Westminster Depot, Mass.

Bed Pelled Cattle. Seven bulls for sale from four to seventeen month old. Will also spare some heifers. All registered. E. B. YOUTSEY, Route 2, Pattensburg, Mo.

Fancy Duroc Pige.

Spring farrow, either sex. Individuality and breed ng not excelled. J. W. KILLAM, Shelbyville, Ill.

### The Workbox.

LADIES' CROCHETED MITTENS. Materials—One hank of Columbia Spanis yarn, one bone crochet hook No. 3. Chain 40 stitches, join and make 5 rows of slip

6th row-Make slip stitch by picking up the front edge of stitch, 5 rows thus, and begin the thumb. Chain 1, 1 plain, chain 1, and continue as above around the row—this noreases the thumb.

Next row plain, next increases same as before. One row plain, continue in this manner until you have 23 increased stitches; be sure to always make the increase in the

same place so as to form a gusset.

Close the 23 stitches together to form the thumb, join, work on the 40 stitches for the front of the hand, 18 plain rows, and decrease by drawing 2 stitches together to 1, until you have desired width. Knit together to close the front. Finish the thumb by narrowing the stitches at the joint, 1 row plain, narrow 1 stitch at joint, leaving 19 stitches. Make 7 rows plain, narrow 2 stitches each row to make point.

Finish the cuff with 1 row of double crochet in each stitch, next row 1 souble, skip 1 stitch, 1 double stitch back in the stitch you skipped, next row 1 single cro-chet, 2 chain, 1 double all round mit.

CHILD'S CROCHETED SHIRT. Use two hanks threefold saxony, 1 bone erochet hook No. 4. Chain 172, then make 10 rows of single crochet (or slipper stitch; working always into back part of stitch, and work lengthwise of the shirt. Work one side first, making 60 single crochet.

Work 36 rows and fasten stitch. Work the 37th row until 23 stitches from the top, then chain 23 for the opening in the front, working same as before till 36 rows are made. Join the 73 rows with 35 chain and break off. Work across for ten rows, beginning so the rows will be uniform as before. Join the sides together, leaving an opening 2½ inches long at side last made for

Crochet a row of holes around neck for ribbon, then finish with an edge of shell. Work armhole the same. EVA M. NILES.

Note: To work slip stitch, insert the hook in the stitch to be worked, draw wool through that stitch and through the wool on hook at same

## Living in a Trunk.

The ability to live comfortably while traveling about and being dependent upon one's trunk is a useful accomplishment, and is becoming not only an accomplishment but a necessity to the race of travelers into which the American people is developing. Those who leave their homes for hotels or camps in summer must lack many convenlences, which the trunk, perforce, must rethat he does not care much how it is, and he packs "so like a man" that he needs no instruction on how to get the best out of a homeless, be-trunked existence. With women it is different. They never get over a desire to have the place they are in attractive to the eyes, and the barrenness of a hotel room always gives a woman a homesick feeling. That is why she carries superfluities, so-called, when she goes on a traveling excursion. Any woman could travel with only a grip, like a man, if she had to, but she won't because she is not comfortable with the mere neces-

This is the way one woman manages who spends about half her time on the As the first element of comfort she chose a large trunk with a flat top. The large trunk costs no more for transportation than a small one and is more convenient. The largest sizes are generally overweight when packed, and now and then they cannot be got through the added to it. doors, which is a condition not without nees; but a thirty-six inch wanted, and which, by some remarkable and little understood natural law, is always at the bottom. The more trays there inch trunk three trays are all that one probably will have, and of these one should be deep. If it is divided for s hatbox it is well, but a tray with many small compartments is not so convenien as it looks, and a trunk with a receptaci in the top is a nuisance to an accomplished traveler, since things stored therein are hard to get at and space is wasted. When the trunk with the flat top is closed it may serve as a table and often is exceedingly convenient in that capacity.

Denim is one of the most serviceable of materials for covers and curtains, as it is easily laundered and packs in a small space. In old blue it will tone with nearly all surroundings. A cover of this made for the trunk takes away the suggestion of "on the move" that is given by a trunk in the room. It should be fitted, and the top should be double, with a layer of costo between the thicknesses of cloth. A " traveling closet " is most convenient

It is made of a strip of cloth 14 yards long, with nine pockets of varying size. It is held to the wall by three large screw hooks, which are easily put up or taken down. Into the long pockets go the slippers and boots. Into the smallest are placed the few vials of home remedies or foilet aids that every woman uses, and the other pockets hold all the odds and ends that at home she would keep in her top bureau drawer. Any one who has once learned the handiness of such a case will never be without one, for it is a genuine multum in parvo. The division of pockets prevents it from de-generating into a receptable for everything all in confusion. It should be made o strong material, stoutly sewed, for there is considerable strain upon it. If one bathes with a sponge and likes to keep it shut up, one of the pockets may be lined with oiled silk for it, but this is not advised, since a wet sponge should never be laid away. It is a disease breeder. Out in the sunshine is the place for a wet sponge

One of the first requirements for living n comfortable terms with one's trunk is to follow a system in packing it; the advantages of so doing are many. If each thing is placed in the same part of the trunk at

Into the bottom put the heavy articles, in the manufacturer's hands the seeds books, boxes of paper, boots, etc. If these are first sorted and cleaned. The manner Into the bottom put the heavy articles,

various things are kept in separate boxes, which fit into the space, it will be found very easy to pack them, much more easy than if they were loose, because they are of awkward shapes and nothing dovetails into anything else, and to get them saugly together, as they must be, to go safely, is a good deal of trouble, obviated by the separate beauti

Into the first tray from the bottom, unless it be the deepest, put the underwear and keep it there. It is no more inconvenient to take what one wants from the tray than

from a bureau drawer. Into the top tray put the hatbox, if the trunk has none, and if it has it is more than likely that it cannot be used for hats.

Trunk makers do not seem to know that a hat has need of much space.—N. Y. Herald.

## To be Made at Home.

There are many articles that may be made at home of a superior quality to those we buy, especially when we who have gardens can raise part or all of the ingredients used, and then we know they are pure and the best of their kind. A small bed of what is called pot or sweet herbs will supply quite a good-sized family, and then there is celery, parsley and several kinds of peppers to be used as reliabes and seasoning. I will give several recipes for making articles at home; many of the ingredients called

for in them may be raised in our gardens. French Soup Powder-One ounce each of parsley, thyme, sweet majoram and the tender leaves of celery; dry carefully in a warm oven and sift through a fine sleve. Bottle and cork; use one teaspoonful for

each quart of soup.

Celery Vinegar—Four ounces of celery seed, one teaspoonful sait, one tablespoonful of sugar. Place in a porcelain kettle with one quart of vinegar, boil one minute; when cool put into a jar and cover, let stand a week, then strain and bottle.

Onion Vinegar-Chop four medium-size onions, add a tenspoonful of salt and two of sugar, mix and let stand covered for three or four hours. Add a quart of vinegar, stir well, let stand in a covered jar a week, strain, bottle and cork. Handy for sauces,

salads, etc. Tarragen Vinegar-Put one pint of fresh tarragon leaves in a two-quart fruit jar, cover with one quart of vinegar, seal tight, stir occasionally, and after two weeks strain, bottle and cork close. This is liked

with fish. Lemon Vinegar-Put three sliced lemons and the peel from one extra in a glass jar. cover with a quart of vinegar; let stand ten days, strain; bottle and cork close. This may be used in the place of lemons, is good in mince or mock mince pies, and it is liked by many to drink; add to it sweetened water

in sufficient quantity to suit your taste. Lemon Extract-For this choose fresh emons with a thick skin and plenty of oil. Dampen a clean cloth with cold water, wipe place, and the exigencies of business, as well | the lemons carefully so as not to start the oil. as those of pleasure, often oblige one to live then with a sharp knife carefully cut off all for a greater or less time in a trunk. It the yellow skin, put this in a large-mouthed does not so much matter for the man who does this—he lives so little in his room night, then pour off the extract into a clean bottle. Pour on to the peel one large table-spoonful of cold water for each lemon peel, shake well, then pour off into the bottle with the extract.

Orange Extract-This is made in the same way as the lemon extract. The white inside skin must never be put into the bottle or the extract will be bitter and unfit to use. Fruit Juice for Frosting-The juice of red raspberries, blackberries and currents may be bottled and used to color frosting. Press out the juice, add by measure twothirds as much sugar as you have juice, oring to a boil, skim and put into small oottles, covering the corks with wax; keep in a cool place. When you want to frost a cake, open a bottle, pour out as much as you need, thicken it with confectionery sugar and spread it on your cake and set in a cool place to harden. Grape juice may be saved in the same way, but I have large bottles of it. I use it in pudding sauces, and it makes a refreshing drink with water

trunk will give no difficulty of this kind. and dry, then put them into a stout, sheer ervoir at the bottom to be filled with one drip into a porcelain or agate ware bowl. thing on top of another, all of which have To a pint of juice add a small half cupful of to be gone over to get the thing that is sugar. Set the bowl into a pan of boiling water and evaporate it one-third. When cool put into a bottle and seal it. This makes a nice coloring and is harmless. It are the better, but with a thirty-six may be used for frosting, candy and ice-

> Citron Prepared at Home-Raise the citron melon, pare, quarter, and divide each quarter crosswise. Boil till tender, so a broom straw will run through it; remove from the water and drain. Make a rich, thick syrup, boil the citron in this till clear, then drain and dry slowly on plates, turning occasion ally and sprinkling powdered sugar over it. When dry pack away in a close-covered jar. MRS. ALLIE L. NAY.

## Observations on insects.

Insects are jointed creatures, ordinarily with six legs when adult, never with more. Centipedes and spiders are therefore not insects. Neither are mites, for they have eight legs when fully grown.

True insects may be divided, for econ omic purposes, into those which bite their food, and those which obtain it by sucking. The former can be killed by a spray of paris green, or some other of the arsenicals; the latter have to be sprayed with kerosen emulsion. The distinction between biting and sucking insects is not so radical as might be supposed; for example, the cater-pillar, a pure biter, becomes a butterfly, or moth, which only sucks; the bee and its allies are true biters, yet we all know how

the bee sucks nectar from the flowers. Ants belong to the same order of insect as the bees, but have very different habits. Ants of the genus Pogonomyrmex make immense nests in the ground, throwing out little pebbles in great numbers. It is intersating to see how carefully they will carry the pebbles just over the edge of the dump, so that they will not fall back into the nest Adapted from Bulletin.

## Concerning Checolate.

The introduction of cocoa into England is first mentioned in 1657. The first mention of the manufacture of chocolate in this country was in 1771.

The processes of preparation today are these: The ripe pods are out from the tree by long poles with a knife at the end. They are left on the ground for about twenty-four hours, and then taken to the "sweating box." This process is somewhat similar t each packing one knows always where it is, and one is less likely to forget it. It simplifies the process of packing, which is made easier by the three trays.

A satisfactory method of packing which has been evolved by experience is this:

of sweating and drying naturally makes this very necessary, and it is done effectively

of sweating and drying naturally makes this very necessary, and it is done effectively by machinery.

Next comes the roasting, another delicate process, since seeds whose fermentation has been successful may here be spoiled by over or under roasting. The action of the heat makes it easy to remove the shells—the cocca shells of commerce, and these, and the germ of the seed, which has become hard, are separated from the body of the hard, are separated from the body of the

The remainder of the seed is then ready for grinding. It comes from the mill a thick; pasty liquid. This may be moulded directly for the "bitter" chocolate, or vanilla, or pulverized sugar added for the other varie-ties. The moulding is accomplished by shaking the paste into the mould.

There are, of course, other and more glaring adulterations of chocolate and

Sensible Scrap Book. If you want to do the very latest thing you will keep a scrap book. Not a scrap book for poetry or cooking recipes, but for pieces of goods like your gowns. It really is a bright ides, and you will value your scrap book so much by and by that you will be more than repaid for the trouble it costs you to make it.

Paste in the scraps by attaching gum or mucilage to the corners, adding pieces of silk, lace, braid or other trimmings, even buttons may be secured to the page. neath the pieces write the date when you first wore the gown and any interesting data concerning it. Some ladies add a picture of the costume cut from a fashion sheet or book, or write out a description of the gown as an aid to the memory.

By and by when your grandchildren ask you about "the good old times," and what kind of clothes people wore then, you can get out your scrap book. The granddaughters will no doubt find much cause for merriment in the outlandish fashions, but you will be quite indignant as you insist that they are pretty and artistic. You live over your youth as you turn the pages. "This white organdle," you say, "was my graduating gown; this pink chiffon my first ball gown. This blue scrap," and you pat it tenderly, " is a piece of the gown I wore when your grandfather proposed to me. The rough brown stuff is like a golf suit," and your pert grand-daughter laughs at the idea of your ever playing golf. There is a black scrap, with a piece of crepe, worn upon a sad occa-sion. You turn the leaf quickly; you do not wish to sadden the young people. There are dozens of gowns represented, and you remember them as well as if you had worn them yesterday. Somehow the fabrics seem finer and the tints more tasteful than those which your granddaughters wear. At any rate, you are glad that you made that scrap book so long ago.-Exchange.

## Why a Bolled Lobster is Red.

In all crustaceans, as, indeed, in almost everything in nature, there is a certain per cent. of iron. Upon boiling the lobster is oxidized. The effect is largely due also to the percentage of muriatic acid which exists naturally in the shell. The chemical change which takes place here is almos similar to that which occurs in the burning of a brick. In boiling a lobster its coat ceases to be a living substance, and to a certain extent it takes a new character.

It is as a brick would be after burning. This effect can also be produced by the sun, but necessarily not so rapid, as the heat of that luminary, although more intense, is not concentrated sufficiently to produce the result. The sun also exercises a bleaching influence which consumes the oxide almost as fast as it is formed, leaving the shell white or nearly pure lime.

## A Weak Stomach.

All who suffer from poor digestion should wear a ten-inch width of flannel bandage next the skin, pinned fairly tight round the body over the stomach. No liver or digest-Green Coloring for Frosting, etc.—Take stomach a twentieth part as much as this fresh, orisp leaves of spinach, wash, drain and dry, then put them into a stout, sheer the stomach, causing that chilly, "miseral little grays. Fold the paste over, lapping the There is no comfort in a trunk with but cloth and pound to a pulp; twist it with ble" feeling, is at the root of half the one tray, because it leaves too deep a res- another person's aid, allowing the juice to indigestion that mortals are heir to. That is why hot-water drinking gives relief. It helps the circulation. A flannel bandage worn day and night all the year round cures the faulty blood circulation of the stomach; consequently it cures dyspen sia. Five hours interval between meals avoiding fried foods, made dishes and mixt ures and observing three or four " Lenten meals "in every week are golden rules for good digestion. A good dinner at night is essary for those whose pleasure or work keeps them up very late, but for ordinary folk who dine at seven and go to bed about ten-thirty only a light, wholesome repast should be taken at the end of the day, when the muscles and nerves are more or less exhausted. A "tired stomach is a weak stomach" is a golden rule to remember, yet now often one hears people say :

"I've been rushing about all day and am tired to death. I must have a big meal to make up for it." You may put the big meal into the stomach, but you cannot make the tomach digest it.-Exchange.

## Domestic Hints.

BROWN BREAD WITH PUMPKIN JUICE. Boston brown bread is made in New England with rye meal and yellow Indian meal. Rye meal or rye graham is not rye flour, but bears the same relation to rye flour that graham flour does to wheat flour. It is found at large grocery stores throughout New England and in some clities of the Middle States, and rye flour will not take its place, as it is a very dif-ferent article. To make two large loaves of this genuine Boston brown bread, mix a pint and a half of yellow Indian meal and a pint and a haif of rye meal. Add haif a cup of and a haif of rye meal. Add haif a cup of molasses and a pint of pumpkin juice, a tea-spoonful of sola dissolved in a third cup of milk. Beat the bread thoroughly and turn it into two Beat the bread tooroughly and turn it into two two-quart brown bread tins to steam for five hours. If it is intended for a Sunday breakfast it should be made on Saturday afternoon and steamed Sunday morning. Boston brown bread makes delicious toast for breakfast or luncheon.

COMMON CHERSECAKES. Put a quart of milk on the fire; beat eight eggs well; when the milk boils, stir them upon the fire till it comes to a curd, then pour it out; when it is cold, put in a little sait, two spoonfuls of rosecold, put in a little sait. two spoonfuls of rose-water, three-quarters of a pound of currants; put it into puff paste and bake it.

In a six-quart pan place one and a haif pints of granulated sugar and a haif a pint of water and set over a brisk fire. Stir until it boils, then add one quart of New Orleans mclasses, stir until it boils again, then add a piece of butter half the size of an egg, and haif a teaspoonful of cream of tartar. Continue to stir carefully until when dropped in cold water it will break and crack when taken between the finers. Pour the candy MOLASSES TAFFY. when taken between the singers. Pour the candy into greased pans; as it couls throw the edges toward the cestre until it is all cool enough to handle. Pull until it is a bright gehien yellow and out with a pair of sessors or sharp knife into pieces the size of a hickery nut.

BANANA PRITTERS. Pare six be

plit each half. Put the pieces of banana into a owl with two tablespoonfuls of sugar and three blespoonfuls of orange juice or wine, and let its preparation stand for an hour. Make a atter, and cook the same as apple fritters.

BOHRMIAN KOLACE. Crumble a yeast-cake, with one teaspoonful of sugar, into one-fourth cup warm milk. When light mix thoroughly with one pound flour, one egg. one tablespoonful butter, one seant pint warm milk, one teaspoonful salt. When light roll out to about half an inch in thickness, cut out with tumbler, and place in a greased dripping pan just not touching. Rub with melted butter. On the centre of each biacult put a little rich stewed chopped prunes. Let rise again and bake.—What to Eat.

Chocolate Pudding.

One-quarter cupful of butter, four ounces of chocolate, one cupful of sugar, four eggs, 2 cupfuls of flour, two teaspoonfuls of baking powder, one-fourth pound of marshmaliows, one teaspoonful of vanills, one-half cup of water. Beat the butter to a cream, add the sugar gradually; beat until light. Add the yolks of the eggs and the chocolate grated. Beat the whites of the eggs, sift the flour and the baking powder, and measure the water. Add first a little water, then flour, and so alternate until the whole has been used. and so alternate until the whole has been used. Beat vigorously for three minutes, then stir in carefully the whites. Bake in greased gem pans in a moderate oven a half hour. While these are baking, make a sauce by putting the marsh mallows with a gill of water into a double boiler. mailows with a gill of water into a double boiler. Stir until perfectly smooth, and about the thickness of cream. Take from the fire, add the vanilla and turn into sauce boat. In serving, put a tablespoonful of this sauce over the top of each little pudding.

## Hints to Housekeepers.

eading needles would not be the painful task that it is to so many aged needlewon they know of the labor-saving device invented by a certain woman. She simply took a spool of thread and a paper of needles, and, without breaking the thread, threaded the whole paper of needles as if they had been so many beads. When her mother, whose eyesight has failed, wishes to sew, she takes the first needle, draws off as long a thread as desired, fastens the next needle to the spool, and so on until the last needle has been taken. Then, of course, her daughter has to begin threading the needles all over again.

It is said that if new tinware be rubbed with lard and thoroughly heated in the oven before being used it will prevent it from rusting.

To make round steak tender, instead of poun the fibre and lets the juice escape, soak it for ar hour or so in olive oil before cooking. Cook quickly over a brisk fire, so that both sides will be well browned (not burned), then move the pan back, so that the inside of the meat may cook more slowly. Melt a lump of butter in two or three tablespoonfuls of good vinegar and pour over the steak while hot. Lemon juice with a little water added may be used instead of vinegar and pour over the steak while hot. gar. Season with pepper, salt, chopped onlon and sage.—January Woman's Home Companion.

For chapped hands, heat one ounce of cocoa butter and one ounce of sweet almond oil in a double boiler. Stir till thoroughly blended, then add one drachm each of oxide of zinc and of borax, drop by drop. When cool add a few drops of perfume. Rub some of this cream into the hands, then pull on some loose kid gloves. If the finger tips are cut off and a circle cut out of the palm, the results will be happier, as covering the hands tightly tends to make them yellow and

For little cherry cake puddings mix two teaspoonfuls of baking powder and one-half teaspoonful of salt with two cups of flour. Rub one rounded tablespoonful of butter till creamy, and add one-half cupful of powdered sugar, and when blended add one egg well beaten. Then add alternately one cupful of milk and the flour mixt. alternately one cupful of milk and the flour mixt ure, and beat well. Have ready some small cups or moulds, well buttered, and put several candled cherries cut in halves on the sides. Turn in the dough, and let them steam one hour. Turn out and serve with cherry sauce. Take 1½ cupfuls of the juice from canned cherries, put it on to boil, and thicken it with one teaspoonful of corn flour and thicken it with one teaspoonful of corn flour mixed with one-half cupful of sugar. When smooth stir in one tablespoonful of butter and serve hot.

me cooks add the grated rind of a lemon to the bread stuffing of a turkey.

A very old-fashioned dish is turkey dumplings.
The recipe, which comes down from Puritan
days, is taken from the pages of Good Housekeeping. Make a rich short-cake dough, rolling
it out on the bread-board, and cut into circular pleces, about four inches in diameter. Spread each piece with butter, and place in the centre of each a tablespoonful of turkey mixture, preive pill or pepsin preparation helps the pared as follows: Chop a cupful of cold turkey, edges, and form into balls with the hands. Arrange in a deep baking dish and bake twenty minutes in a quick oven. Serve with bechame

Salt is most excellent for cleansing the teeth It hardens the gums and sweetens the breath If used persistently enough, salt will cure massicatarih. A weak brine should be made and snuffed up the nose, allowing it to run down the throat. There is nothing better for the relief of lired or weak eyes than to bathe them with a strong solution of sait and water applied as hot as it can be borne. Sait rubbed on the black spots on dishes will remove them, and sait placed will assist it to dissapear when washed. One of the most effective remedies known for adache is to place a pinch of sait on the tongue and allow it to dissolve slowly. In the tongue and allow it to dissolve slowly. In about ten minutes it may be followed by a drink of water. The colored Japanese straw mattings which are so generally used as floor coverings are best kept sweet and clean by washing them with a solution of salt and water after the weekly sweeping. A freshink stain on a carpet may be removed by immediately applying a layer of sait. The ink will be ab-orbed, and when the sait is black it should be removed and another layer applied, repeating the operation until all the ink is removed and the carpet returned to its former

## fastion Motes.

. Although the separate waist has diminished in importance as an article of full dress it has by no means disappeared. In fact, it is too convenient to ever disappear entirely. A new winter shirt waist is made of cotton etar and stylish. Embroidered bu are used to trim these waists, the colors of which are either the Russian blue and red, with a toucl of black, or the more varied Bulgarian color com binations. Coarse white lace looks well on car binations. Coarse white face looks well on can-vas waists, and launders well. The showing of heavy mercerized vestings used for waists is very large. Besides white, there are pale blues, pinks and mauves to choose from. A delicate shade of buff, called champague, is popular. These vestings are expensive, but they wear well and launder without losing any of their fine ustre.

. Mohair makes up well in shirt wai This material has almost taken the place of the flannel waist so long a favorite. Mohair has a dust-shedding nature and a disposition against wrightes that recommend it to the practical. A white mohair waist, box-plaited in small plaits and fastened with tiny brass buttons, is a desirable armost toward with a talker way. able garment to wear with a tailor go a trumpess that makes it for general a trimpess that makes it for gener egable to a more ornate silk waist.

so, The return of slik to favor after a long run of cloth has resulted in a renewal of interest in fancy weaves of slik appropriate for blouses. One sees some exquisite pempadour designs, handsome brocades and warp effects. Plaid sliks are in high favor. It ought never to be forgotten in buving slik waists that whatever is

simply made, but should be the perfection of cut and finish. With a brown cloth, quite elaborate carriage gown, was worn a brown surah waist, pin-tucked across the front and over the shoulders and upper part of the sleeves. There was not a particle of trimming. The high, tucked stock was finiased with a narrow white ruching and a white maline bow at the back. A necklace of old-fashlored gold beads was worn.

of old-fashioned gold beads was worn.

g\*0 Waists for house wear are more elaborate.

Violet crepe de ohine is used for a handsome blouse. It opens in the back and is shirred on cords in groups, one at the threat, a second across the bust and over the tops of the sleeves and a third a few inches above the waist line. The sleeves have a group of shirrings just above the elbow and again across the fullest part of the large puff. The fullness is gathered into high cuffs of deep cream lace, lined with violet chiffon. A very deep yoke of the lace is also lined with violet chiffon, and both yoke and cuffs have applications of medallion-shaped bits of the violet crepe. This waist, like all the new ones, is unlined,

g\*A lovely white waist is made of panne crepe

so A lovely white waist is made of panne crepe le chine, a new, very soft fabric. It has a square de chine, a new, very soft fabric. It has a square yoke of faggotted together bands of the material, the points of the yokes extending over the the points of the yokes extending over the sleeves, giving a very long-shouldered effect. Below the yoke the waist is simply gathered, and is very likely bloused into a narrow belt. The full bishop sleeves are gathered into cuffs of the faggotted bands. Directly in front, crossing the edge of the yoke, is applied a large rose of Venice lace, the petal edges of which are heavily raised with hand embroidery. Similar lace applications are seen on each shoulder. Metal print velvets make charming waists. This fabric has been much improved of late. For velvet waists the so-called Gibson model does extremely well. Fancy stocks of Persian design are pretty well. Fancy stocks of Persian design are pretty with velvet waists, but better still, relieving the rather heavy look of them, are airy lace or chiffon

e\*. One may be as extravagant as she dares in the matter of stocks and neckwear generally. Beautiful dress accessories are seen in all the separative dress accessories are seen in all the shops. Clever fingers may copy most of the simpler designs, and it is not a bad plan to buy a becoming one at a good shop, and make others like it, in different colors, of course. Chiffon or silk muslin pieces, odd bits of lace, or fancy trimming can be made to do wonders. Just now most of the stocks are shaped so cleverly that they need little booking to keen them in where. A little booking to keen them in where. need little boning to keep them in shape. A little featherbone is all that is ever required. Since stiff, tight collars are fatal to the beauty of the neck, we should be properly grateful for the

... One may be very extravagant, also, in her little turnover collars of drawnwork and handembroidered linen. Just now there is a craze for Japanese glass cloth, which has a sheen quite unlike ordinary linen, and presents the appearance of thin silk tissue. The Japanese se some of the old patterns for their drawnwork, but they manage to give it an entirely new look. In other words, the Japanese character persists, no matter what art they adopt. So far, persists, no matter what art they adopt. So far, comparatively little Japanese drawnwork has been brought to this country, and the shops ask varying prices for the same sort of thing. A beautiful collar was priced at one shop at \$10.50. The shopper, passing on her way, perceived in a neighboring store window the same collar, as far as those choice things are ever duplicated. Alert for a possible bargain, she went in and inquired the price. It was \$18.50. the price. It was \$18.50.

... The smaller pieces are not quite as expensive. A collar and cuff set, exquisitely made, with a double row of fancy hemstitching around and a dragon fly in the middle, partly embroid-ery and partly drawnwork, may be had for \$3.50. Blue and pink threads are often introduced in the drawnwork to good effect.

... The most expensive of these collar and cuff sets are tound at the French linen shops. Here one may pay as high as \$15 for a set. The linen is of gossamer fineness, and the embroidery is a work of art. The worst of it is that they are so perishable. No ordinary laundress ought to be allowed to handle them. The best way is to send them to a professional "scourer," although the name has an unpromising sound for a delicate

6°e Long lace veils are becomingly draped over hats and tied at the side. These are forty-six inches long, and only as wide as the ordinary tulle or net face veil. Dotted net veils of the same size are edged with lace, and are very pretty. There is no disputing the become

of these ample veils. . There is nothing especially new in hats, exept that the all-fur hat is not now so frequently seen as the fur combinations with embroidered and jeweled bands, maline and other rich ma-terials. These are less trying than all fur, and are not so heavy looking. Silky, furry beaver hats are very popular, and very becoming. They need little trimming, and almost invariably have ostrich feather decorations and little else be-sides. A great many feather hats are seen, the iridescent pheasant feather hats being considother street gowns.

•• In buying of plumage hats, one should consider that they do not go well with some color Brown, red, violet and most of the mixed-colo fabrics require black or self-color hats. The plumage hats are extremely good with black. dark blue or green cloths.

. Medlum-sized hats are more and more in favor. Small, boat-shaped turbans and toques are oftenest seen on the street, and it is pretty well settled that no woman of taste appears in the shopping district in a picture hat. These are kept for carriage and formal wear. Veils pin on the small hats nicely. If the brim extends far over the face, it is better to put the veil directly on the hair, adding, if one chooses, a lar or lace veil to throw back over the hat.

... In the matter of small but imports ies of dress, the new washable gloves are ordially endorsed. They come in all colors vell as white, and cost \$1.25. They are real kid and are well shaped. The washing is a simple matter, tepid water, white soap, and a soft cloth only being required. The gloves are washed on the hands and dried in a warm place. Heat is to be avoided.—New York Evening Post.

### The World Beautiful. Lilian Whiting, in Boston Budget.

"My idea of heaven is that there is no melo-drama in it at all; that it is wholly real. Here is the emphasis of conscience and experience; this is no speculation, but the most practical of doctrines. Do you think that the eternal chain of cause and effect which pervades nature, which threads the globes as beads on a string, leaves this out of its circuit,—leaves out this desire of God and men as a waif and a caprice, altogethe cheap and common, and falling without reason or merit?

We live by desire to live; we live by cho "We live by desire to live; we live by choice; by will, by thought, by virtue, by the vivacity of the laws which we obey, and obeying share their life,—or we die by sloth, by disobedience, by losing hold of life, which obbs out of us. But whits I find the signatures, the hints and suggestions noble and wholesome,—whilst I find that all the ways of virtuous living lead upward and not downward,—yet it is not my duty to prove to mysel the immortality of the soul. That knowledge is hidden very cunningly. Perhaps the archangels cannot find the secret of; their existence, as the eye cannot see itself; but, ending or endless, to live whilst I live."—Emerson.

The poetry of life is to be had for the asking,—perhaps for the taking. It lies around us. It is held in perpetual fee. It is to be had on the same terms as the proce or the prosaic. It asks only the eye to discern and the ear sensitive to its subtle ons. But its attainment is condi-

" Who loves the music of the sp And lives on earth—must close his ears To many voices that he hears."

handsome brockers. It ought never to be for a silks are in high favor. It ought never to be for a silks are in high favor. It ought never to be for a silks are in high favor. It ought never to be for a silk waists that whatever is is drowned in the noise and tumuit or only paid for them they will be only half dress when were. One is no longer extravagant in these garments.

With handsome walking gowns, waists of sunny spaces and blue skies, if he would fain listen to the celestial music. Thus, eve With handsome walking gowns, wasses or crepe de chine, exactly matching the cioth in belor, are made in tiny tucks or with hematitehed or inggetted yokes. Any of the soft silks are also of latter-day life. "God himself does not of latter-day life."

peak prose," isays Emerson, "but com ates with us by hints, omens, infer ence and resemblances in objects lying around us."

For the poetry of life is the spirit of life. It is not in the external, the visible and the tangible. Indeed, it is submerged and exterminated by all this elaborate materialization. The poetry of living is in propor. tion to the sensitiveness to subtle vibrations. .

## " He must be musical,

who would really get the best out of life. It is in vision and impression that the realities and the essentials of life are true Gaining these one is rich whatever may let go. When Emerson and found. that " the imagination exists by sha unced g the ethereal currents," the phrase f contemporary readers largely as an tion, a mere figure of speech. No trac. the genius of Marconi has called real currents into service, has har them to carry messages, they are a a visible wire. And it is in the ethereal atmosphere that one may li will, and in which alone, he can ach most potent results, discern his truer and set his life to the divine key. not without meaning that the proph to the solitudes of the desert. It was without its most deeply related signif to human life, in the present as well the past, that Jesus sought the forty seclusion on the mountain. In the of latter day life in the great cities becomes the absolute prisoner senses. The objective life demands his entire time and energy. He is perpetually en scene. If he is not Anywhere he is getting ready to go There. He has no margin of leisure. His days are gregarious. If he love Dante or Browning he is not supposed to pursue his enjoyment in the infinite solace and resources of poetry by himself, but to manifest his preferences in the gregarious enjoyment of his poet at the

club. He is read to, and lectured to. and recited to, and played to every hour in the day and evening from November until May. Where has any individual thought the faintest chance to develop itself? It is smothered under the weight of materialities which are too apt to degenerate perilously near to trivialities. test of a poet" is, to be sure, "the power to take the passing day, with its news, its cares, its fears, as he shares them, and hold it up to a divine reason, till he sees it to have a purpose and a beauty, and to be related to astronomy and history, and the eternal order of the world," but it is seldom that the dry twig so blossoms when subjected to the incessant pressure of contemporary city life. One cannot walk the streets nor enter crowded drawing-rooms in his singing robes. And the fine gold of life is fretted away and the days that should be filled with divine images go down before the struggles and the perpetual assertion of the more machine life " of material exigencies. New conditions not infrequently offer

those "liberated moments" which the soul must have if it live at all. The indispensable thing in life are those real relations of the mind and the heart that make friendships, companiouships, possible. If heaven is a place "where there is no melodrama,' where everything is "wholly real," why must it be considered as a state to be indefinitely postponed till after that change we call death? Why cannot life be "wholly real" now and here? Why cannot we, who stand on the threshold of this New Year of 1904 so order the inner forces and so control by definite choice the outer events of living as to enter on that finer order where all is wholly real and there is no melodrama? The new volume with its unwritten pages await their inscription.

The Antlus, Colorado Springs, Col.

## Curious facts.

-Senator Knute Nelson of Minnesota, who is a Norwegian by birth, speaks Norwegian, Swedish, Danish, German and English, and has a good understanding of French. He is one of ed linguists in the Senate -A startling fact which has recently been emonstrated is that the equator is not a perfect circle. If you could drop a plumbline from Ireland through to New Zealand, it would be some what longer than another which cut the earth at right angles to it. The difference has not yet een ascertained with absolute accuracy.

-Male "housemaids" are the most recent contribution to the solving of the servant problem in Great Britain, it seems. Several thousands of foreign young men have recently been transported to London to engage in general omestic work in British house nothing but commendation is heard on the sub-ject. These menservants, say their employers, do the work that has generally been allotted to women in a cleaner, quicker and more thorough fashion than the sex they have displaced. They waste less time, have no grievances, no "viswaste less time, have no grievances, no vis-it rs," ask no higher wages, and do not bother about "evenings out." Altogether, if the future carries out the prophecy of the present it wil not be long before the reign of women workers wifery " will be quite eclipsed by the masculine

superiority therein shown. -The long, stiff tail-feathers of a wood pecker enable the bird to eling to the trunk of a tree in an upright position for a long time and bore away for food. The bill of a woodpecker is often asstrong as that of a bird of prey, and it the woodcock of northern Maine the bill is found at its greatest development. The tongue mucresembles an angle worm, and is very long an admirably adapted for sucking sap. Someti the tongue is not only long and brush-like. barbed at the point, so that it can impale prey. The feet are adapted for swimm various ways.

—The dwarf trees which the Japaness skillfully produce are becoming popular Europe for the construction of miniature la scapes, etc. It may be a fine art to produce oak or apple tree five hundred years old only two feet high, yet to Occidental ideas pears a sort of torture. A race so skilled in use of paper and colors could produce artifi-trees which would have quite as much app-ance of life and serve every ornamental purp quite as well.

-A recent chemical examination of the b deposit, resembling boiler scale, that has for to a thickness of three-quarters of an inch ut the coping of the balastrade surrounding "Stone Gallery" at the base of the dome of Paul's Cathedral, reveals the curious fact that entially a calcium sulfate collected from ir. In two centuries the smoke and gases London chimneys have charged the rains sufficient sulfurous and sulfuric acids to c the stone with a deposit that strikingly resem calcareous tufa. It is thickest on the under of the copings because of the dripping

-The scientific culture of potatoes is where practiced as in Germany. In that c try, states Consul-General Mason, dozen-skillful and experienced/growers give their w skuttul and experienced growers give their witime and energy to the propagation of impirations, and the conditions of soil, exposurpurpose for which each is best suited are understood. Certain varieties excel for others for starch and dextrine, others for hot, and yet others for stock feeding. Many best serts are new, but not more than two varieties are included in the crop of pra-growers, although about one hundred are by dealers, and as many as five hundred catalogued as long ago as 1963.

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Doetry.

CHRISTMAS HYMN.

The vast eternal rolling spheres Hold in their starry zone sublime One star that brightens all our fears aigh all the darkest hours of time; on sea to sea, through every clime, d Christmas be the joyous time; en Christmas bells, oh! chime and ring, life is bright where Christ is King. MARY E. LEWIN. Mass.

WE FORGET.

any tender words and true meant to say, dear love, to you; y things we meant to dot we forget.

usy days were full of care; ong night fell, and unaware passed beyond love's leading prayer While we forget.

vermore through heart and brain breathes an undertone of pain; igh what has been should be again, We would forget

We feel, we know, that there must be Beyond the vell of mystery place where love can clearly see And not forget. -Harper's.

THE BOOK OF HOURS. Come, let us read the Book of Hours, Illuminated by His hand Who taught the waves their saraband,

Who prompts the thrushes, shuts the flowers. He sends the wind into the grass, And leads the man and maid to meet; He treads the storm with fire-shod feet, And at His nod the clouds amass.

To us He gave swift hand and eye, Made flowers and faces good to love; Said, "Go, and take your joy hereof,

And I shall call you by and by."

So, love, prepare we, lowly-wise, By spelling out His grandeurs here, By spenning our magnature in ere, That day His Presence to revere, Nor stand at gaze in paradise. —Christian Gauss, in the January Century.

TWO PICTURES.

1. An old farmhouse with meadows wide, And sweet with clover on each side; and a bright-eyed boy, who looks from out 1.

The door with woodbine wreathed about, And wishes his one thought all day:
"Oh! If I could but fly away
From this dull spot the world to see, How happy, happy, happy, How happy I should be."

II. Amid the city's constant din, A man who round the world has been, Who, 'mid the tumult and the throng, Is thinking, thinking all day long:
"Oh! could I only tread once more The field path to the farmhouse door, The old green meadow could I see, How happy, happy, happy, How happy I should be.' -Universalist Leader.

THE SEVEN AGES OF A BACE HORSE.

First, the foal, Wobbly, and nursing at its mother's side; And then the whinnying colt, with gentle eyes And softly floating mane, frisking in paddock, Nibbling luscious green. Then comes the saddle, Fiercely fought at first, with many a kick, But later borne with grace. Then daily training Months of pampering care, and trials on a track, Traveling, and racing under clever hands, Eager to records make or break, Win cup or land fat purse. And then a mishap, Tendon strained, and as a "selling plater"

His days of money earning nipped in bud, And he has played his part. The sixth age

The horse of gentle breed docked, and drawing With weary stride, eyes bulging, and mark of

On his shrunk shank; and the full deep breath, Once drawn in measure strong, labors And whistles in its sound. Last scene of all That ends this strange, pathetic history, For which 't were mercy to implore oblivion. Sans tail, sans sight, sans strength, sans every

-Florence M. Blair, in the Rider and Driver.

Brilliants.

" Lord! who Thy thousand years dost wait To work the thousandth part Of Thy vast plan, for us create With zeal, a patient heart."

Ye need not fear to leave the shore; Not seldom youth has shamed the sage With riper wisdom—but to age Youth, youth returns no more! Be yours the strength by will to conquer fate, Since to the man who sees his purpose clear, And gains that knowledge of his sphere Within which lies all happiness— Without, all danger and distress—

And seeks the right, content to strive and wait-To him all good things flow, nor honor crowns him late. -Edmund Clarence Stedman.

Before a hundred shrines I incense burn; With living love my lot seems to abound, I smile, work, sleep and live the daily round f present life with seeming unconcern. Yet closelier seek the truth and thou shalt learn, Beside this life another life is found, Whose vast and trackless depths I may not

Whose heights I may not scale and here return, ere soft wind blows that bears upon its air sage of Love Supreme, that woundeth not.

age of Love Supreme, that woundeth not. Holy Ones once worshiped here are there.

turning from my present earthly lot, "Ye" I love you! you are real, are fair! link not that I ever have forgot." -Margaret Crosby, in Scribner's.

emember all that time has brought-The starry hope on high,
The strength attained, the courage gained,
The love that cannot die. rget the bitter, brooding thought,

e living blame; love hates to name The frailties of the dead! -Oliver Wendell Holmes

rlous Night! When our first parent knew from report divine, and heard thy name, not tremble for this lovely frame,—

glorious canopy of light and blue? heath a curtain of translucent dew, in the rays of the great setting flame, Tus, with the host of heaven, came, Creation widened in man's view. ld have thought such darkness\_lay con

thy beams, O Sun! or who could find, Whilst leaf and fly and insect stood revealed, That to such countiess orbs thou mad'st us blind! Why do we then shun death with anxious strife? It light can thus deceive, wherefore not life?
—Blanco White.

ance companies put out from three million to four million annually, and it is said that one patent medicine firm alone contributed seven million last year. A conservative estimate places the number of 1903 calendars made in the United States at one hundred million.

A Fractical Farmer.

Some years ago, before the bicycle was in such favor as it is now, a farmer went integan ironmont favor as it is now, a farmer

## Miscellaneous.

A Case of Destiny. A heavy shower of rain had left me stranded in the ancient and sleepy city of Elchester. The country roads, bad enough at the best of times, were so sloppy as to put bicycling out of the question. I knew nobody in the town, and, as there is only one place of interest—the cathedral—I went there.

In doing this I believed I was spending an idle hour. As a matter of fact, I was unconsciously fulfilling the object for which I was probably brought into the world.

The building appeared to be empty, and amused myself reading the tablets that recorded amused myself reading the tablets that recorded the lives of worthy people who existed generations ago. I found them interesting, for my own name happens to be Clutton, and, though I nave never troubled myself about family "trees," I knew that we came from the west of England. In other words, the knights and dames who lay in Elchester cathedral were in all probability my ancestors. I wish that they had had the foresight to leave me some of their property.

wantersors. I wan that they had had the lore-sight to leave me some of their property.

Wandering through the cloisters, I came across a living picture of much greater interest and beauty than the images of stone and iron lying

It was a young lady who was sketching a corner of the building, and making a frantic attempt to do justice to the wonderful arches and

quaint windows.

In order to get a peep at her face, I made a pretence of examining a monument close at hand. It was erected to the memory of "Sir Francis Clutton, 1153-1201." His legs were crossed at the knees, which signified he had fought in three crusades; and had it not been that some barbarous visitor had broken off the gentleman's nose, he would have made a most imposing figure.

gentleman's nose, he would have made a most imposing figure.

I took the liberty of standing for a moment by her side to see her work. "If you will excuse my saying so," I ventured, "you have drawn that arch wrong. It is out of perspective."

"I know it is," she answered, with a little moue. "But I can't get it right. Are you an artist?"

"Not available."

"Not exactly," I said. "But I know some-thing of architectural drawing."

"I wish you would show me how to get the wretched thing in so that it doesn't seem to be

standing on one leg."
"With pleasure!" I took her place on the camp stool, and, on another piece of paper, made a rough drawing of the corner which had puzzled her. "What a number of people of the name of Clutton are buried here!" I said, by way of

opening the conversation.

"Oh, yes; they used to be a great family in days gone by," she said. "Henry VIII. took them away when he was reforming the church. The Cluttons didn't change their religion tast enough. Edgar Clutton was the last of them. But he leserved to be punished," she added. "He did What was that?" I inquired.

"He was betrothed to his cousin, Dorothy Clarence, and jilted her." "And what became of Mistress Dorothy Clar-

"She went into a convent. They say she d ed of a broken heart, and soon afterward Sir Edgar was executed for high treason." 'A severe punishment!" I suggested. "Not at all!" she said, warmly. "He was mean wretch to behave as he did! Since thos

days a Clutton has never owned an acre of land in Devonshire. And they will never get back their position of land owners unless—" She stopped.
"Unless what?" I asked.

"Well, there is a ridiculous old legend which has been handed down; but I don't suppose it will ever come true. It runs: "My lord shall come to his own again When a Clutton squire weds a Clarence

"So the theory is that when a Clutton marries Clarence, and so repairs the wickedness of Siz Edgar, then prosperity will return?" " Yes; but I am afraid that will never happen

now," she said, with a little sigh. "Nobody knows what has become of the Cluttons, and the Clarences are nearly extinct." arences are nearly extinct."
"It appears to me," I said, "that you are sperstitious about the country legends."
"I am afraid I am," she said, laughing, "be-

cause so many have come true. But this one never will." Why not?" "Because," she said, "I happen to be the last of the Clarences. I was named Dorothy, after

the lady who died of a broken heart."
"Are you a Miss Clarence?" I asked. "But I am afraid I can't help those unfortunate Cluttons," she went on, "because I don't know

At this, I am afraid, I winked at the broken-

At this, I am arrand, I when the consed monument of Sir Francis.

"Besides," she continued, "even if I did, I couldn't give them back their property, because By this time my rough drawing was finished and she was kind enough to say it was clever.
"May I keep it?" she asked. "I should like

to paste it in my scrapbook."
"By all means. Would you like me to sign my

" Yes, please, and put the date." I did as she told me, signing myself " Richard When she saw what I had written she went

pale with astonishment.

"Are you really descended from those old monuments?" she said. "Not from the monuments," I answered; "but I believe I am descended from that unfeeling brute who broke Miss Dorothy Clarence's heart."

Then she turned scarlet at some thought which struck her, and looked uncomfortable. But I could not resist the opportunity of teasing her. "There is no doubt that you will have to marry me," I said, "and so restore the Cluttons to their ormer glory."
"I don't see that," she said. "I—I don't be-

lieve in those old legends.

"I thought you said you did."

"Yes, I believe in some of them, but not this
one. Besides, I am not going to marry any By this time she had quite recovered her quanimity, and was prepared to treat the matter

"It seems hard lines that I should be obliged to fall in love with you," she said, with a mis-chievous gleam in her eyes. "I am afraid you

"Perhaps not," I admitted. "But, then, Dorothy, people never marry their ideals."

"Many thanks for your help with the Sketch.
It is time for me to o."

Stime for me to go."

She packed up her drawing materials; but I noticed she did not offer to return my sketch, in spite of her indignation. She packed it away in her portfolio. However, that may have been an

But I was not going to let her escape so easily.
"You will let me see you home, at any rate?" "I think not," she answered. "I live a long

'So much the better; we can discuss family legends and other things."

"Besides, 1 am well known. If I am seen walking through the streets of Elchester with a stranger everybody will want to know who you

You will, of course, explain that my name is Clutton, and they will grasp the situation at

once."

She bit her lips with vexation.

"Come," I said, "don't let us worry about destiny or anything else. I will walk with you as far as your house. You must in mercy permit me that, for I don't know a soul in the town. Then if you find an additional cousin such a nuisance, we will say goodby forever and a day.

Will that do?"

"Yes," she said, doubtfully.

"Yes," she said, doubtfully.
On our way through the town she pointed out the house where at one time a branch of the amily used to live. It is now converted into a hairdressing establishment—a truly inglorious

I think few men have had a more difficult courtship than mine, for Miss Dorothy fought against the guidance of destiny with all her might. Curiously enough, the rest of the legend came true, for a distant relative left her a moderate fortune. The terms of her will ran: "I leave the sum to my kinswoman, Dorothy Clutton, that the ancient prophecy may be fulfilled, and I beg that she will employ it as far as practicable in repurchasing the Clutton property."

And all this arose from a chance encounter in an old cathedral on a wet afternoon.—Athol Hol-loway, in Chicago Tribune.

## Poutb's Department.

SISTER MOLLY'S BEAU. Us childern got t' be as nice
As ever was, an' when we go
T' answer 'at doorbell, we got
T' make a little how—jess so!
An' of it s 'at big mustached man
'At came from heaven s'other day
T' call on Molly, we must put
Our nicest manners on' an' say:
"Jess walk right in."

An' 'en we got t' go upstairs As quiet as we ever knew An' say t' Molly: "Sister, dear, A gentleman's t' call on you!" 'Cause ef he'd hear us say: "Oh, Moll, 'At guy 'ith whiskers jess come in! ''
'At guy 'ith whiskers jess come in! ''
Why, 'ere would be an awful row
An' we'd get spanked by Moll, like sin,
'Cause he's her beau!

e Molly's got a beau, they can't Nobody give her any sass,

Nor tell th' man 'at Moll jess stands
All day by 'at big lookin' glass;
We got t' make out like she looks
Like 'at all times, 'cause she 'ud slap
Our heads right off, ef we 'ud tell
Him how she looks in her old wrap
When he ain't there!

l wisht 'at they'd stop spoonin' so,
A-sittin' on th' sofa—say!
I saw him put his arm around
Moil's walst, I did, las' Saturday!
I wisht 'at they'd get married, an'
We wouldn't have t' primp up so—
They ain's no fun in livin' now
Sance Sitter Moil's get a bean e Sister Molly's got a beau,

-Raltimore News.

A Friendly Woodchuck. Very early last spring a woodchuck poked her black nose from the mouth of the burrow in which she had spent the winter, and blinked her little round black eyes in the sunlight. Then she came out and lay basking on the mound of hard earth before her doorway. She looked very weak, and she was certainly dreadfully thin. Her grizzled pelt hung locally on her bony frame, and when she moved it was with a languor not usually observed in woodchucks. The fact is that she had but just awakened from an all-winter sleep, and as she had fasted since the previous October she was not only drowsy but famished. But perhaps it was disuse as much as anything else which caused the evident weakness of her limbs, for as she moved about a little, stretching herself in different directions, it could be seen that she was gaining strength with every movement. By and by she turned around, and, putting her head and shoulders into the burrow, began raking out with her forepaws all the earth, leaves and grass with which she had blocked the en-trance in the fall. With this rubbish came many living things—black beetles, a hornet, and a large green frog, all of which had been sleeping away

the winter at the woodchuck's door.

After she had made a neat pile in front of the burrow, and covered it up with fresh loam from the tunnel itself, the woodchuck had strength to go off in search of some food. There was very little to get just then, for the winter had barely some but she found a little nath of green clover. gone, but she found a little patch of green clover on the sunny side of a large rock, a tuft or two

managed to make a moderate breakfast. Then she returned to the burrow and stayed there for two days. By that time the grass had grown considerably and the woodchuck had less difficulty in getting a meal. And every morning after food became more plentiful; the clover appeared in larger and thicker patches, and gradually the wrinkles in the grizzled skin of the groundhog began to disappear.

One morning, after the little rodent had had her morning meal of clover, and she was taking a sun bath on the mound of earth in front of her doorway, some small object struck the mound about six inches in front of her face, and threw a pinch of the dirt sharply in her eyes. She did not know what the trouble was, and she did not stop tonfind out, but pitched headfirst into the burrow and stayed there. As she disappeared, a small boy, brandishing a Flobert rife and followed by a little yellow dog, jumped from behind a hillock and ran up to see how near he had come to the 'chuck. He pulled a grimace when he saw where his bulled. up to see how near he had come to the 'chuck. He pulled a grimace when he saw where his bullet had pitted the earth, reloaded his weapon, and went back to his hiding place. But the woodchuck, not being quite a fool, remained where she was safe until the boy became tired of waiting and came back to the hole, the yellow dog still at his heels. The boy now picked up the dog and put its nose to the mouth of the burrow, and after a few words of encouragement the cur, which had more assurance than wisdom, plunged into the black hole. The boy ast down on the mound of earth and velled "Sit sat down on the mound of earth and yelled " Sic sat down on the mound of earth and yelled "Sic 'em, Prince!" and for about a minute no doubt Prince was doing as he was bid. After that, it seems that the woodchuck did most of the "sicking," for the dog backed out of the burrow with two terrible cuts on his head, and howling in a most unprincely manner. Then, tucking his tail as far between his legs as he could get it, he made for home by a short cut and at his very best greatest demand, and snall farming is an industry.

ready to topple back again out of sight at a sign from their mother. Every morning now the whole family might have been seen moving through the grass to the spots where the clover grew the thickest. For a short time they lived in peace, but one evening they made showed closely beace, but one evening they made showed closely and eating off close to the ground, three long rows of young peas. The owner of the peas said very little, but he drove to town and brought back a stick of dynamite, which he thrust far into the burrow. A minute later there was a muffled boom, and the farmer went off, satisfied that he would not be bothered again by that family of the stransverse rows on the forgue, and as there are as many as 105 on each row, it follows that they have an aggregate of 14,175. And yet burrow. A minute later there was boom, and the farmer went off, satisfied that he would not be bothered again by that family of woodchucks. But in the evening a cautious gray head was thrust from the mouth of the hole, and soon our old woodchuck crawled from her home and made off slowly across the field. The dynamite had killed the young ones, but the mother had been only stunned. She went directly to an old been only stunned to stunned the she went directly stunned to stunned the she went d woodenicks. But in the evening a cautous gray head was thrust from the mouth of the hole, and soon our old woodehuck crawled from her home and made off slowly across the field. The dynamite had killed the young ones, but the mother had been only stunned. She went directly to an øld burrow which she had occupied two years before, and next morning there was a large heap of fresh earth in front of it. She lived there quietly until the latter part of the summer, when, returning after an absence somewhat longer than usual, she found the entrance to her home barred by a snarling black head, with a white stripe down the front. The premises had been seized by a skunk, and the woodehuck was obliged to seek a residence elsewhere. She started to dig a fresh tunnel on the other side of the field and for hours she threw out the soil with her strong claws. The followother side of the field and for hours she threw out the soil with her strong claws. The following afternoon she was still at work, when the figure of a man, in brown overalls, crept under the brow of the hill and lay down behind a rock at the top. For half an hour the woodchuck worked on; at last she appeared at the doorway for a breathing spell. A little curi of white amoke leaped from behind the rock, there was a sharp report and the woodchuck dropped back into a newly made grave.—N. Y. Bun.

A Practical Farmer.

"I'd rather spend £15 on a cow."

"But what an idiot you would look riding about the town on the back of a cow."

"Perhaps so," replied the farmer, "but not half such an idiot as I'd look trying to milk a bicycle."—London Times.

Why the Boy Falled. Why the Boy Felled.
He watched the clock.
He was always grumbling.
He was always behindhand.
He didn't believe in himself.
His stock excuse was "I forgot."
He wasn't ready for the next step.
He did not put his heart in his work. He learned nothing from his blue He felt that he was above his po He chose his friends among his inferiors. He was content to be a second-rate man. Heruined his ability by half doing things.
He never dared to act on his own judgment.
He did not think it worth while to learn how.
He tried to make "bluff" take the place of while.

He thought he must take amusement every He did not learn that the best part of his salary was not in his pay envelope.—Success.

## Gems of Thought.

....Only those temptations which we encounter in the path of duty, in the path of consecration, only those our Lord promised us we should conquer. If you are in temptation for temptation's sake, for no other purpose beyond it, you are lost.—Phillips Brooks.

....The truth, the hope of any time must be sought in the minorities. Michael Angelo was the conscience of Italy. We grow free with his name, and find it ornamental now, but in his own day his friends were few.—Emerson.

....Fear nothing, blame nothing—so much as thy vices and thy sins.—Thomas a Kempis.

....(drace is of a growing nature: in the way to Zion they go from strength to strength.—Thomas

Zion they go from strength to strength.—Thomas .... There are chords in the human heart,

strange varying strings—which are only struck by accident; which will remain mute and sense-less to appeals the most passionate and earnest, and respond at last to the slightest casual touch.

Dickons.

Call it happiness or call it blessedness, the life whose end is righteousness is a life which satisfies, and which one is not only willing but glad to live; its ways are ways of pleasantness, and all its paths are peace.—Rufus Ellis.

A solid and substantial greatness of soul looks down with neglect on the censures and applauses of the multitude.—Addison.

If the average man could do as much work as he thinks he can, there would be little demand.

as he thinks he can, there would be little demand for labor-saving machinery.—Answers.

.... It is little we can bring to pass, but our will and desire may be large. Nay, they may grow till they lose themselves in the infinite abyse of God.—John Tauler.

God.—John Tauler.
....O friend, it has been a strange year for you; sin in it, folly in it, neglect of duty and of God in it; but if the heart is crying, "I will not let thee go except thou bless me," if the interests of life are moral ones for you, if the one worth of being alive at all is daily self-conquest to the glory of God—then bid defiance to your sin and failure, in the name of Christ forget the things that are behind, there is a year worth living ahead of you.—G. H. Morrison. G. H. Morrison

....The way to transform society is to bring the edeeming influences of your own life to hear redeeming influences of your own life to bear upon it. The way to light a room is to strike a match. That will at least show where brighter jets may be turned on.

## Hotes and Queries.

THE LATEST NEW YORK BRIDGE .- " V. J." The Williamsburg bridge has a width of 137 feet, as compared with the seventy-three feet of the Brooklyn bridge, and will accommodate more than 128,000 passengers in an hour upon its four trolley tracks and two railroad tracks. Of these of coarse grass near a spring, and with these and a few mouthfuls of bark from a nearby tree she managed to make a moderate breakfast. Then she returned to the burrow and stayed there for

they were employed as jesters.

BNAIL CULTURE.—" S. W.": The taste for pace.

Not long after, the woodchuck appeared at the mouth of the burrow with a family of five little ones. They had been born some time before, but his was their first appearance in the open. They were pretty, dark-eyed, soft-coated little fellows, ready to topple back again out of sight at a start from their mouth of the south of the smalls of Bornance and Switzerland alone. The snalls of Bornance and Switzerland alone. no means an extravagant calculation of the annual consumption in France and Switzerland-alone. The snails of Burgundy have long been famous for their exceptionally delicate flavor, but nowadays that district produces but a comparatively small proportion of the total output, one cause for the falling off being the treatment of the vines with phosphates. The department of Jura, however, followed closely by Basses Alpes, and Cote d'Or and Provence, are the French districts where the snails thrive particularly well. The variety

substance they are able to create.

ATMOSPHERIC NITROGEN.—" R.": The gradual but ultimately inevitable exhaustion of the known nitrate deposits of South America lends a growing interest to the methods which have been devised for obtaining a supply of nitrogen for fertilizing purposes from the inexhaustible storehouse of the air. That this can be done as a scientific process has long been known. The first method was by passing a current of air over red-heated copper, whereby the oxygen combined with the metal to form oxide of copper, leaving the nitrogen free. At first the nitrogen red-nested copper, whereby the oxygen combined with the metal to form oxide of copper,
leaving the nitrogen free. At first the nitrogen
thus produced was fixed by combination with calclum carbide to form nitrate of lime (Kalksticktoff) or calcium cyanimide, a combination of lime
carbon and nitrogen, which had all the essential
properties of nitrate fertilizer. But as the use of
calcium carbide rendered the product unduly expanaive, a method was sought which would employ a substitute for that material, and this,
according to United States Consul-General
Mason of Boston, was found by Dr. Erlwein,
who brought the nitrogen into combination with
a mixture of powdered charcoal and lime in an
electric furnace. The product of this combination is a black substance containing, besides the
lime and carbon, ten to fifteen per cent. of nitrogen, in perfect condition to be used as a fertilizer. From the experiments thus far made
with this new artificial nitrate—which is known

in commerce as calcium cyanimide—it appears
that its nitrogen acts upon plants quite as effectively as that contained in a proportionate quantity of nitrate of potassium or sodium nitrate.
(Chile saltpetre). Whether it can be done on a
very large scale and at a cost which will make it
economically available for general agricultural
purposes remains to be demonstrated by practical experience.

purposes remains to be demonstrated by practical experience.

Dogs and There Names.—"Chester": The spaniel is so called because the original breed came from Spain, and the first arrivals in England were called Spanish dogs. The Spitz dog got its name from its sharp-pointed nose. "Spitz" means "sharp point" in German. The Spitz is known also as Dalmation dog, because his native home is in Dalmatia. The dachshund was used for drawing badgers, and the dogs still are great favorites among German hunters, aithough the breed has become a little too delicate for fighting such a gray old warrior as the badger. The fox terrier earned his name not from any fancied resemblance to the fox, but because long ago, in England, these terriers, much larger and stronger then, were used everywhere by sportsmen for drawing and killing the fox, they being sent down into his burrow. It is sald that no good fox terrier ever backed out of a burrow without his fex. If he came out he had the dead fox gripped. If he didn't get the fox he didn't come out, but died there. The bulldog used to drive cattle, and as he was trained to meet the rushes of the bull by seizing him by his most sensitive point—the nose—the sturdy, brave dog came to be known in time as bulldog. In some countries he is known as bull biter.

The quantity of material required for the medium slice it years of sge. If he pattern, 461, is cut in sizes for girls of g, 10, 12 and 14 years of age.

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## Historical.

The fourteenth century in England, ac cording to Tit Bits, a penny was demanded for a pair of chickens and twopence-halfpenny for a goose and a halfpenny would purchase a dozen new-laid eggs. Wheat sometimes fell as low as one shilling and eight pence a quarter, though after a great storm, or in a time of "grievous famine," it would rise as high as as sixteen shillings or a pound a quarter. Still, at an average price of six shillings a quarter, a good many pounds of bread could be hought for a penny. A penny an acre was considered a fair annual rent for pasture land and sixpence for arable land; cart horses were almost a drug in the market at three shillings apiece, and oxen at five shillings. In the days of the second Henry a farm could be equipped with three earl horses, half a dozen oxen, twenty cows and two hundred sheep for a ten-pound note, a sum less than would purchase a single cow nowadays; and a sovereign would be ample to pay the year's rent of the farm.

—In regard to the leaders of the American Revolution the New York Tribune says: They were chiefly American born, and, despite contentions to the contrary often made in this country, they were chiefly of English parentage. Of the signers of the Declaration of Independence only eight were born outside of the colonies and of

tions to the contrary often made in this country, they were chiefly of English parentage. Of the signers of the Declaration of Independence only eight were born outside of the colonies, and of those five were British and three Irish. Of the army officers, Lafayette, Steuben and De Kalb were allens. Schuyler was American, of Dutch and were allens. Schuyler was American, of Dutch and the incompetent Gates were born in Ireland and Sullivan was of Irish ancestry. The traitor Leand Mercer and St. Clair in Scotland. But the others, Washington, Greene, Wayne, Harry Lee, Morgan, Putnam, Ward, Warren, Mifflin and the rest, were American born of British ancestry. In civil life the British-American element was markedly predominant, including the names of Adams, Jefferson, Morris, Livingston, Franklin, Lee, Otts, Page, Randolph, Madison, Pendleton, Drayton, Gadsden, Pickering, Pincheny, Gerts, and suits all the many soft materials in vogue. The and suits all the many soft materials in vogue. The Drayton, Gadsden, Pickering, Pinckney, Gerry, Paine, Hancock, Sherman, Rodney, Harrison, Dans, King, Clinton, Ellsworth, Stockton, Clymer, Rush, Shippen, Dickinson and Bedford. Hamilton and the Tuckers were born on nearby British islands, of British parents. Jay, Laurens and Boudinot were Americans of French Huguenot ancestry; Muhlenberg was of German ancestry; Frelinghuysen came of Dutch stock; Thomas Paine and Robert Morris were born in England. The Carrolls and the Rutledges were of Irish extraction.

—Apparently there were schools of shorthand

were of Irish extraction.

—Apparently there were schools of shorthand as early as the third century, and in Egypt. A recently discovered papyrus was a contract between a shorthand teacher and a man who wished one of his slaves to acquire the art. The fee was 120 drachmæ, forty to be paid on apprenticeship, forty at the end of a year, and the balance when the slave was proficient. Shorthand writing was then presumably not so easy of attainment as it is now. Among the other documents of the Oxrhynchus Papyri is the account of a fatal accident, and of the body of the victim of a fatal accident, and of the body of the victim being examined by the coroner of the day, in being examined by the coroner of the day, in company with a public physician. That dates back to the second century of our era, in which judging by other discoveries the formal invita-tions to dinner might be literal renderings of ours

at the present time. at the present time.

—One of the signs pictured in Julian King Colford's "The Signs of Old London" in the January St. Nicholas has peculiar interest for all Americans. What is called "The Crown and Three Sugar Loaves" was the sign of the historic house which exported to America the celebrated chests of tea that went into Boston harbor in December, 1773, the first overt act of rebellion in the Revolution. While the contest gave America her independence, and set aside the rule of George III., it did not over-throw the business of the oldest tea house in Great Britain. The business is carried on today in the same old place as in Revolutionary times. Its sign—the sign of "The Crown and Three Sugar Loaves" has survived the stress of age and storm and fire. The great fire of London swept within half a block of the shop, but the old sign

itself reigns today.

— The form of some of the old Roman stoves that have been unearthed suggests that, as today, fuel in southern Italy was scarce. They were one time. For instance, one resembled a minia ture castle. It was square, with a small tower at each corner. The top was toothed like the battlements of an old fortress. The whole battlements of an old fortress. The whole served as a brazier to heat the apartments for roasting meat and for heating water. An Iron pan in the centre contained the glowing charcoal. This was surrounded on all sides by a hollow chamber for water, with a capacity of about six gallons, which was filled by raising a hinged lid in the top of any one of the towers. T water was drawn off by means of a tap, whi resembled the modern appliances employed for the same purpose. The spits for roasting the meat were placed across from tower to tower. At the front and back were pairs of handles for transporting the apparatus from one place to another. The houses of the ancient Romans were innocent of chimneys.

Home Dressmaking. Wints by May Manton.



4611 Girl's Costume, 4612 Blouse Waist, 8 to 14 years. 32 to 40 bust.

S to 14 years.

22 to 40 bust.

Chirl's Cestume. 4611.

Veiling in all colors is much used for young girls, frock, but is especially charming in the lighter ones.
The very pretty costume illustrated shows the material in one of the new reseds shades, with machine stitching in corticelli sike of the same color, yoke and straps of taffeta, the latter held by gold buttons showing a tracery of black and drop ornaments that combine reseds with black and white. The color combination is a peculiarly good one and the effect admirable, but there is the whole long list of beautifut tones from which to choose.

The costume consists of the waist and the skirt which are joined and closed together at the back.

Cauliflower.

aend you their big plant and seed catalog, together with enough seed to grow.

1000 fine, solld Cabbages,
2000 fellcious Carrots,
2000 rich, buttery Lettuce,
1000 plendid Quions,
1000 rare, luscious Radishes,
1000 goloriously brilliant Flowers,
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Both fronts and back of the waist are tucked, and are gathered at the lower edge, but the tucks of the fronts extend to yoke depth only, while those of the back are full length, and the fronts are joined to a vest-like portion which consists of a tucked yoke with fall portion below. The skirt is cut in five gores, the seams being concealed by the tucks.

The quantity of material required for the medium size (12 years) is 5½ yards 27 inches wide, 3½ yards 44 inches wide or 3½ yards 52 inches wide, with ½ yard of silk for yoke.

The pattern, 4611, is cut in sizes for girls of 8, 19, 12 and 14 years of age.



The shirred sleeve with cuff is a most graceful one, and suits all the many soft materials in vogue. The smoothly fitted lining is faced to form the cap, and the full portion is shirred and arranged over it, the cuff being drawn on over the lower part.

The flowing sleeve is exceedingly pretty for dinner and evening gowns, and is suited to any material soft enough to allow of shirring. It is cut in one piece, shirred to fit the foundation which is snugly fitted, and terminates below the shirrings.

The quantity of material required for the medium size is for fancy sleeves 2½ yards 21 inches wide, for shirred sleeves with cuffs, or for flowing sleeves 2 yards 21, 1½ yards 27 or 1½ yards 44 inches wide, with 1 yard of all-over lace for shirred sleeves with cuffs, or for flowing sleeves 2 yards 20 all-over lace for shirred sleeves with cuffs and 2 yards of applique for flowing sleeves.



4615 Seven Gored 4816 Girl's Shirred 22 to 34 waist. Costume, 6 to 12 years.

Seven-Gored Skirt. 4615. To be Made With Inverted Plait or Habit Back. To be Made With Inverted Platt or Habit Back.

The seven-gored skirt that flares freely and gracefully at the lower portion retains all its vogue in spite of the many novelies introduced. This one allows of either the inverted plaits or habit back and is trimmed with shaped straps that add much to its style. As shown it is made of nut brown hopsacking, with straps of broadcioth piped with velvet, and is stitched with corticelli slik, but all materials used

stitched with corticelli slik, but all materials used for skirts and for entire gowns are suitable. The skirt is cut in seven gores that are shaped to widen generously below the knees and to provide the fashiouable fiare. The back gores are cut for inverted plaits, but can be cut off at indicated lines when the habit effect is preferred. The straps are pointed at their ends and are arranged over, the gores before the skirt is seamed.

pointed at their ends and are arranged over, the gores before the skirt is seamed.

The quantity of material required for the medium size is \$\frac{1}{2}\$ yards \$2\$ inches wide, \$\frac{1}{2}\$ yards \$4\$ inches wide or \$\frac{1}{2}\$ yards \$52\$ inches wide when material has figure or nap; \$\frac{3}{2}\$ yards \$4\$ inches wide or \$\frac{3}{2}\$ yards \$52\$ inches wide when material has neither figure nor nap. The pattern, 4615, is cut in sizes for a 22, 24, 26, 28 30 and 32-inch waist measure.

Girl's Shirred Costume. 4616. Girl's Shirred Cestume. 4616.

To Be Made With or Without the Body Lining or With Separate Guimpe.

Shirred frocks are exceedingly becoming to little girls as well as in the height of style. This one includes a graceful bertha and the wide tucks of the season. The model is made of peach-pink cashniere, stitched with corticelli silk, and with yoke, collar and cuffs of cream lace, but any pretty soft material is appropriate. As illustrated, the waist is all in one and is lined, but it can be made with a separate guimpe when preferred and the lining can be omitted whenever desirable.

guimpe when preferred and the lining can be omitted whenever desirable.

The costume consists of waist and skirt. The waist, when made high necked, is faced to form the yoke. When made with the separate guimpe is cut off at the lower edge of the yoke and finished with the berths. The sleeves are plain for a short distance below the shoulders, form full puffs below and are finished wth narrow cuffs. The skirt is straight, shirred at the upper, tucked at the lower edge.

The quantity of material required for the medium size (10 years) is 7½ yards 21 inches wide. 5½ yards 77 inches wide or 4 yards 44 inches wide, with 2 yard of all-over lace. The pattern, 4614, is cut in sizes for girls of 6, 8, 10 and 12 years of age.

HOME DRESSMAKING. SPECIAL PATTERNS—For a catalogue of any pattern illustrated on this page, send is cents (coin or postage stamp), state number, shown on cut, and size wanted, and write your name and address distinctly. Mail orders filled promptly. Address Massack—Etts Plougeman, Boston, Mass.

10,000 Plants for 16c. This is a remarkable offer the John A. Salzer Seed Co., La Crosse, Wis., makes. They will send you their big plant and seed catalog, to-

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vritten pages

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of the black

dozens of their who exposu el for food, ers for alco-Many of the than twenty of practical dare listed indred were

## The Morse.

Detecting Lameness. "Examination for lameness," says an experienced horseman, "is very difficult, and needs to be very careful. A horse may stand sound and show no alteration of structure, and at the same time go lame. In some cases he will show lameness only after standing a considerable time. If we If when we are exercising the norse his actions excite suspicion, even though we cannot exactly say that he is going lame or groggy, it is good practice to put him in a stall and allow him to stand at perfect ease for a few hours and then test him again. If for a few hours and then test nim again, an owner objects to this delay we are justi-an owner objects to this delay we are justi-gradually.

In ensiling apple pomace no special care While there are reasonable grounds for suspicion, the examiner should not be of Agriculture. Simply shovel it into the suspicion, the examiner should not be content until he has satisfied himself whether or not his suspicions are well If leveled off and allowed to lie uncovered is sufficient to condemn him, as he is at the three inches on top usually spoils, and this least temporarily unsound. If the lameness is evidently caused by some recent injury which will undoubtedly soon disappear, the examiner should express his opinion to that effect, and the purchaser may then decide whether or not he will buy. If the horse be lame, it is not the duty of the It was kept in this way for months and examiner to determine the cause of lameness, especially if it be obscure. The

ess exists, and with the exception of

mentioned, it constitutes unsoundness, and

is sufficient to condemn the animal." Not only is it necessary to exercise the greatest care in detecting lameness in a horse that is offered for sale, but any one having a horse go lame must be very careful in preparing to treat the case that the trouble is properly located. It is often a more difficult matter than some suppose to perfor " this very essential operation. We recall a case that occurred a few years ago where a very prominent veterinarian was called to treat a horse that had gone lame. After an extended examination the cause of lameness was said to be bone spavin. After several days treatment, during which time the horse grew rapidly worse, it was discovered by the attendant that the horse had a bad case of thrush. This was accordingly treated, the other treatment being discontinued. As the foot got well the lameness disappeared. Another case is reported where an experienced horseman wrote to a veterinarian describing the symptoms exhibited by a lame horse and asking for a the formation of the feathers and the genremedy. A plan of treatment was outlined for him, but after following it for some time the horse was no better. On visiting the horse the veterinarian discovered that the horse was being treated in the wrong leg. Upon applying the remedy to

A common instance of failure to locate the source of lameness, says one, writer, is where the animal is suffering from "sweeney," or atrophy of the muscles of the shoulder. We have seen horses blistered on the shoulder and various remedies applied to the same place, while the trouble was in the foot, and in one instance a seton in the frog of an animal's foot cured a case of "sweeney" of several months standing. and which all sorts of remedies had failed to help. The ailing foot had led the horse to use it and the leg as little as possible, and the muscles in the shoulder shrank from lack of action, just as a blacksmith's biceps will if he stops using a hammer or swinging a sledge. Yes, lameness sometimes requires very careful examination to detect

Notes from Washington, D. C. Good roads legislation is being suggested galore. The latest is a bill introduced by Representative Burnett of Alabama, authorizing the issue of Treasury notes to be egg-producing ration.

GUY E. MITCHELL. used in the purchase of bonds of the various States and counties desiring to improve their public roads. The bill provides that at an election duly held in any State or county, where a majority of the voters are in favor of bonding the State or county, such bonds shall be issued and these shal be purchased by the secretary of the Treasury of the United States, and Treasury tes issued therefor which are to be regular legal tender. The money thus realized is to be used for road making; no provision is made, however, by the bill as to the

manner in which it shall be used.

The government of New Brunswick is preparing for a systematic practical educan of its agriculturalists along fruit-grow ing lines. The government is to operate a number of orchards upon most approved methods, with the ultimate idea of having at least one model practical orchard in each county. A start will be made next year with five orchards, distributed throughout the Province, apples and plums. Tie government will not own the orchard, but will furnish the trees, and direct its planting and laving out. The owner must then sign a ten-year agreement that he will attend to the orehard according to the instructions of the department of agriculture, he to have the products of the orchard. The plan for the apple orchards is trees thirty feet apart and on each side of the row a space 75 feet wide, kept absolutely free from growth and given good cultivation. Before winter a cover growth of clover is to be planted on this strip. It is stated that this systematic orchard object lesson work has been very successfully carried out in Nova Scotia.

Growers of live stock can be assured, from experiments noted by the Department of Agriculture, that apple pomace or cider pomace has high feeding value. "This byproduct of cider and vinegar," said the editor of the office of Experiment Stations of the Department, "has generally been considered almost worthless, frequently s nuisance. It has been looked upon as too watery to pay for hauling, although it contains less water than many root crops. Ill conducted feeding experiments with pomace have given it the reputation of being unsufe, and of causing shrinkage in milk when fed to cows. Fresh pomace ferments quickly if exposed, but it can be easily preserved in the modern silo, and pomace silage is growing to be appreciated as a cheap and altogether healthful feeding stuff. We do not know of any cases, where fed judiciously, in which the quality of the milk or butter was injured through using pomace as a silage or where the quan tity was reduced. Some dairymen in dif-ferent parts of the country are feeding as high as fifty pounds a day with good effects, while others are feeding it in smaller amounts in connection with corn sliage. The results of the test and use seem to demonstrate a good feeding value to this material, and to show that no farmer who has a silo and who lives convenient to a cider mill where the material can be had for the hauling, should fail to use it." Government analyses show a composition not widely from corn ensilage, which contains

only six per cent. less water than pomace Some unpublished digestion experiments with sheep also show it to compare very

favorably with corn silage.

Experiments by the Vermont station show apple pomace a good ration for cows, and greedily eaten by them, in fact, to be quite equivalent in feeding value to corn silage when used as a partial substitute for that material. Both the Vermont and Mas-sachusetts stations have fed from twentyobserve a man, whose horse is being examined, inclined to keep the animal moving as much as possible, we become suspicious. If when we are exercising the horse his tained remarkably well. Assuming that

silo, either on top of corn silage or alone. it will keep well into the spring. About serves as a blanket to keep the remainder in good condition. A farmer in Massachu-setts is reported to have preserved apple mace in the early forties of last century by packing it in a pit under his barn, thus anticipating the silo. fed to cows during the winter. The following table shows the principal constituents of apple pomace sliage as compared with a possible case, such as has been already corn silage:

Fibre, 4.5 Nitrogen free extract, 11.8 Fat, 1

The skyward price of eggs makes rather interesting reading of directions recommended by the Department of Agriculture to produce early moulting in hens for the purpose of inducing winter laying. In case moulting is much delayed, the production of the fall coat of feathers in cold weather is such a drain on the vitality of the fowl that few, if any, eggs are produced until spring, while if the moult takes place early in the season, fowls begin winter in good condition, and with proper housing and feeding may be made to lay during the en tire winter. To induce this early moulting, directions are given to this effect, according to the Van Dresser method. Cut down August feeding heavily for a number of days, then feed well on a ration suitable for eral building up of the system. The West Virginia station conducted experiments as follows: Selecting two-year-old white Leghorns, Rhode Island Reds, beginning Aug. 5, the chickens received no feed for thirteen days except the very small amount they could pick up in fifteen by one hundred-foot runs. They were then fed liberally on mash beef scraps, corn, wheat and oats, i. e., a ration rich in protein or nitrogenous matter, which is believed to be especially valuable for promoting the growth of feathers as well as muscle. The hens stopped laying on the seventh day. Thirty days after the test egan the Rhode Island Reds had practically a complete coat of new feathers, had begun to lay, and within a week from that time one-half of the hens were laying regularly, while another lot of Rhode Island Reds, which had been fed continuously, were just beginning to moult, and the egg production had declined materially.

The results seem to warrant the general conclusion that "mature hens which are fed very sparingly for about two weeks, and then receive a rich nitrogenous ration. moult more rapidly, and with more uniformity, and enter the cold weather of winter in better condition than similar fowls fed continually during the moulting period on an

## From Cows to Chickens

A good little herd of pure-breds is kept by Frank Cook of Middlesex County, Mass. They include about a dozen animals, all Guernseys eligible to registry, and headed by a son of Cassiopeia, the Pan-American prize winner. Among the cows are several neavy milkers, some yielding eighteen to twenty quarts a day while fresh. They are larger animals than most of the Jerseys, and the herd with the rich and uniform coloring make a handsome appearance while feeding in the pasture.

This herd, although a choice and profitble one, is soon to be sold, Mr. Cook having been for the last year or two engaged in a poultry business which now requires the entire attention of the owner and his son, a graduate of the State agricultural college. It is found that several thousand chickens will keep up the fertility of the farm as well as cattle, and under skilled manage-ment and special facilities for marketing they prove far more profitable. Middlesex County, Mass. G. B. F.

## Feeding Beets and Turnips.

If I wanted to carry only a few heads of cows, instead of growing corn silage, I would grow mangolds, for mangolds can be grown on a well-prepared land at the rate of one thousand bushels per acre.

We feed rutabaga turnips for our cows without difficulty, and with much benefit. Feeding them soon after milking in the morning and commencing in small quantities, we gradually increase until each ani-mal uses about one-half bushel a day. Rutabaga turnips are very cheaply grown on coarser land than is required for mangolds, and need less hand labor than mangolds require. While we do not regard them as quite as good as mangelds for cows, sheep like them better than any other food we grow.-Prof. G. M. Gowell, Orono, Me.

## Pigs and Artichokes.

Artichokes are said to have the same feeding value as potatoes, but may be fed without being cooked, and while the average crop of potatoes will be two hundred to 250 bushels per acre, artichokes will range from eight hundred to twelve hundred bushels. They may be planted and cultivated the same as potatoes, but it would be better to reserve a field for the purpose as



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they are very difficult to get out of the three tons, making six tons for sale, which ground. I have found it a good plan to plant them in the fall of the year, or very The next ye early in the spring. As soon as the ground freezes up cut off the tops even with the

ground and burn them. As scon as the frost is out of the ground in the spring, turn the pigs on the artichoke field, putting in a movable pen for each eight or ten pigs, according to their size. Dig up a few hills of the artichokes here and there to start the pigs looking for food, and as soon as they find the artichokes are in the ground they will dig them readily. In this case any rings should be removed from the noses of the pigs. They will in this way do very well with a small grain ration each day if they have free access to water. They should be left in the field until about the first of June, when the land should be thoroughly worked over and the remaining artichokes dug out, and the field mediately sown with rape, which in six or eight weeks will be ready to turn the pigs on again. By this method two crops can be obtained from the field one year and none the next, as it requires a long season to mature a crop of artichokes.

I know of no method that will produc

Wayne County, Pa.

## Creameries Prosperous

The Franklin Harvest Club, with ladics were the guests of S. B. Slate in Greenfield Jan. 2. The essayist was A. A. Smith on "The Best Stock to Raise on the New England Farm." Every one agreed that boys and girls were the best. Mr. Smith took up sheep husbandry in all its particulars, espe cially the spring lamb part.

The Massachusetts Creamery Association nvention and butter exhibit promises to convention and butter exhibit promises to be a great success. The programmes will of 127 shipped. They are the most be out in a few days. The greameries of docile, attractive of all classes of milk be out in a few days. The creameries of our part of the State are mostly in a very sperous condition. At the annual meet ing for election of officers at Northampton. Dec. 23, the reports showed that the price had not ruled quite so high in 1903 as dur ing the previous year, but compared with price, milk, etc., it was favorable for the creameries. The possibilities for the creameries were never more encouraging Montague, Mass.

## Honey of White Clover.

Some of our more pronounced honeys with a very decided flavor and aroma, when used as a staple adjunct of food, might become too much for many lovers of good honey, but used day by day, white clover taken judiciously never palls on even the most delicate palate. All who enjoy honey can return to it time after time without experiencing any feeling of satiety, because the blending of the several properties are in clover so fine and evenly balanced that tion. Everywhere we have large areas of this plant spread like a rich mantle, and the course of cropping practiced by most of our farmers particularly favors the luxurious growth and full development of this bounti-ful honey-yielding plant. Too much of its precious bloom is wasted for want of willing es' tongues to suck it up and supply it

## An Eight Years Rotation.

I have an eight years rotation in which we till four years out of the eight. One-half of the entire area that can be plowed is plowed every year and every acre fertilized. We will suppose that we are starting on the second round, and that the whole farm has had good tillage with the best of implements, and every acre fertilized every year

and everything done at the right mom-We ought to get the following results per acre: The first year one acre of corn, quivalent to five tons of hay; the next year one acre of oat and pea-hay, equivalent to three tons; the third year one acre of clover in two crops, equivalent to three or four tons; the fourth year an acre of pota-toes, two hundred bushels, \$100; next an acre of hungarian, three tons; the sixth year an acre of timothy, three tons for sale; and the seventh year an acre of timothy,

The next year it is pasture good for two or three tons to the acre, on which the cow can go out and fill herself in a short time, and lie down and make milk, filling the pails. We have \$175 in cash and as equivalent of sixteen or seventeen tons of hay. Allowing for shrinkage of hay and keeping of teams we still can feed sever cows that ought, in intensive farming, to give \$60 cash, or a total of \$420 plus \$190 from this acre in eight years, or \$76 per acre per year. Now as the new farming has pressed all the pasture land into fields possible, I assume that the average one hundred-acre farm has fifty acres of fields. This gives a total return of \$3800 aside from house, garden, orchard and team. This picture may need some shading, yet it is not extravagant. It sets hope where hope ness was enthroned. As the old way had failed, we turn to the new for inspiration.— J. W. Sanborn, Gilmanton, N. H.

The goat dairy company recently started ere has just received a carload of choice Maltese goats. Among notable specimens are Malta, a five-year-old hornless buck more pork per acre of land than this. If fed are Malta, a five-year-old hornless buck to pigs in pens, the artichokes should be weighing two hundred pounds, originally cooked, otherwise they are likely to get intended with his twin brother for the exspread over the farm by small ones getting hibition at St. Louis. He is one of the best derful getter of twins, was bred to tenhorned ewes which produced sixteen kids, nine of them hornless. He is snow white, with long lustrous hair reaching to his fet-

Bene Dick, a horned, long-haired yearling buck of royal lineage, said to be the best milk buck in the United States. Capriola, a small gray horner, one of trip-

lets, a most wonderful milker and most

prolific breeder. Others of equal value are in the lot. The goats endured the trip of 2500 miles in an open box car, with a loss of only four out goats, an ornament to yards or pastures. They are rich milkers, prolific breeders usually have twins; have young three times in twenty-four months, frequently two times yearly. Their milk is more delicious than cow milk for domestic purposes, being immune from tuberculosis and every disease to which cows are subject. Hence their milk is conceded by eminent physicians of the world the only absolutely safe or healthy milk for rearing babies or puny children, makes them strong and healthy, highly recommended as a cure for that appalling malady Bright's disease of the kidneys, flesh maker for consumptives, debilitated persons with wasting diseases. Maltese milk taken before retiring insures sound, restful all night's sleep. Maltese goat milk has not that strong repugnant taste of other breeds of goats. The milk butter, cheese are far superior to, and sell at much higher prices than like products of the cow, the milk selling readily at twentyfive cents per quart to invalids.

Malden, Mass. Canadian Butter Rules.

The recent act of the Canadian Parlia ment providing for the supervision of the manufacture and sale of butter products the manufacture and sale of butter contain ing over sixteen per cent. of water, or the use of acid, alkali or any substance that will cause the butter to absorb water, milk or cream is prohibited.

The department has issued a circular giv ing some most practical advice, which will apply to the creameries of this country as well. The circular says the pressing needs of the Canadian butter industry as outlined

\* 1. Better constructed and more sanitary creamery buildings. "2. Improved refrigerators at the crear eries where the temperature can be kept at

"3. Delivery of the cream in a fresher

least below 36° F.

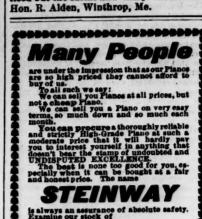
and sweeter condition where the cream-gathering sytsem has been adopted. "4. Stronger and neater finished packages for export butter.

"5. Heavier and purer vegetable parchment paper for lining packages. "6. Frequent and regular shipment of butter from the creamery to cold-storage warehouse, where lower temperature can

"7. Greater precaution in transferring outter from the creamery to the cars to prevent it from becoming unne

### Among the Formers.

It is time for a few of the farmers to pur-chase a \$15 suit of clothes and begin to come in with other people.—W. E. S., Dover, Me.
The forests of Maine are fast being ground into pulp wood, and it was not the forests of the State that need to be advertised but the farms and dairy industries. Hon, R. Alden, Winthrop, Me.



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